



# **EIS 95**

## **EMISSIONS INVENTORY SYSTEM CODING MANUAL**

(Revised January 29, 1997)



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## THE NEW EIS CODING MANUAL

For 1995, the EIS Coding Manual has been completely rewritten. All supplemental materials and instructions have been assimilated into the new manual, errors have been corrected, and fresh examples and explanations have been added. Likewise, the Coding Forms have been redesigned and should serve as an aid in understanding EIS and in editing Submittal Files.

The E.I. Unit welcomes comments on the new Coding Manual.

On January 29, 1997, this manual was revised. Aside from a few cosmetic changes, the previously separate files, ERRATA.DOC and 137-140.DOC were combined into this manual. No other substantive changes were made.

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## WHAT'S NEW FOR 1995 (and subsequent years)

- 1) Cards 01-04 should always be included in every Submittal File.
- 2) Underscore characters in the "Facility Name and Physical Address" field (Card 02).
- 3) Underscore characters in the "Owner Company Mailing Address" field (Card 03).
- 4) New "Air Permit Number" field (Card 04).
- 5) Permit Emission Point Description in the "Comment" field (Card 14).

# THE EMISSION INVENTORY SYSTEM

The Emissions Inventory System (EIS) is made up of over thirty COBOL computer programs that create and maintain Louisiana's point source Emissions Inventory data base. The EIS COBOL programs accept input in the form of computer files. These EIS "Submittal Files" must be in ASCII format, not dBASE<sup>®</sup>, WordPerfect<sup>®</sup>, Lotus-123<sup>®</sup>, or other commercial file format. The EIS Submittal File format is the subject of this EIS Coding Manual.

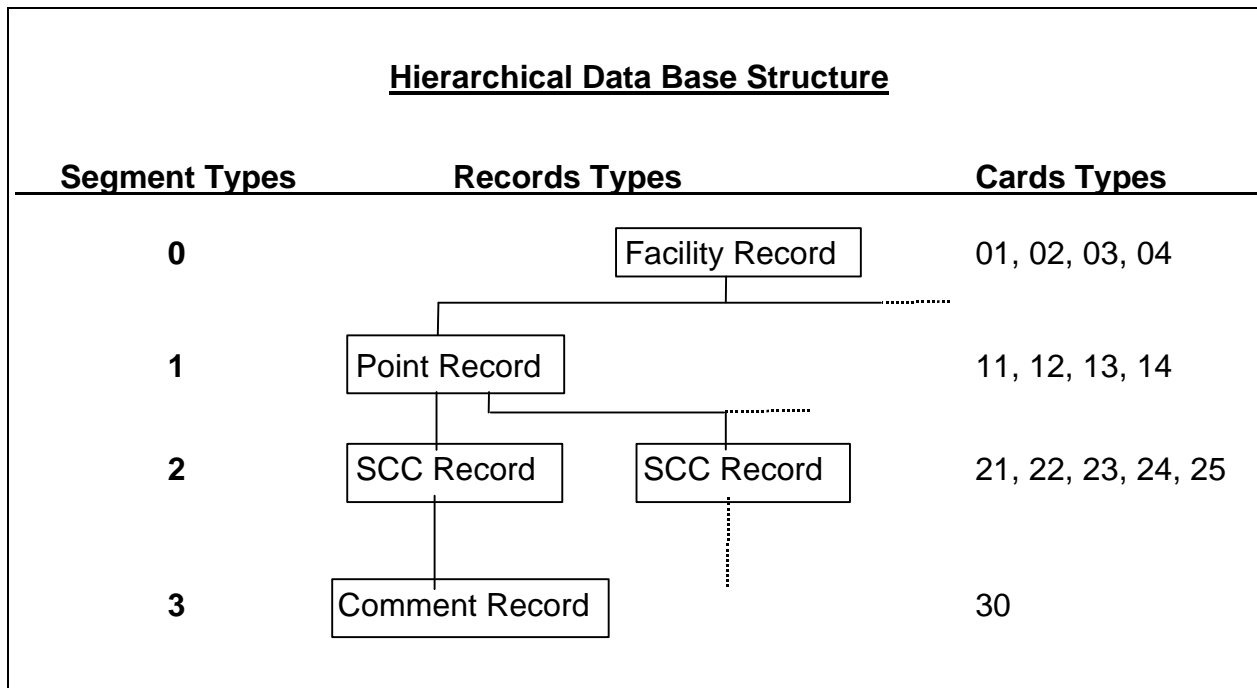
Each line in a Submittal File (In EIS lines are called "Cards") is 80-columns long. There are fourteen different types of lines (or Cards) in EIS, each differentiated by a unique Card Type. Each Card contains fields of data related to a particular aspect of a facility, i.e., Card Types 01-04 contain facility-level data, Card Types 11-14 contain point-level data, and Card Types 21-25 contain process-level data.

The Action Code field on a Card determines whether the EIS programs attempt to add, change, or delete the data contained on the Cards in each Submittal File. The EIS programs examine each Card (and Action Code) and determines what type of action is required. For example, a "Card 13A" would be interpreted by the EIS programs as an "Add Transaction," i.e., an attempt to add data to the Master File.

See Appendix H for a further discussion of Transactions and Action Codes.

## EIS DATA BASE STRUCTURE

All of the emissions data that are reported to the Emissions Inventory System (EIS) are stored in computer files. The EIS data base is hierarchical in structure; it resembles a tree's root system. (see diagram below) There are four Segments (0-3) in the EIS hierarchical model, with the Facility Record at the top, followed by the Point Records, Source Classification Code (SCC) Records, and Comment Records.



Each facility must have at least one Point Record and each Point Record must have at least one SCC Record. There may be up to 1,295 Point Records, and each Point may have up to 10 SCC Records.

## POINTS AND SCCs

A "NEDS Point" is one, or more, pieces of equipment that are assigned a two-character NEDS Point id and reported as a single entity to the EIS. Each NEDS Point is associated with 1-16 SAROAD Pollutant Codes on Card 13s, and each pollutant is associated with 1-10 Source Classification Codes on Card 23s. SCCs describe one, or more, processes associated with each reported air pollutant. The AQD only requires that six pollutants be reported: VOC, CO, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and Pb.

Facilities, not the AQD, assign NEDS ids to equipment.

Tanks that share a common SCC may be grouped together for reporting purposes and reported as a single NEDS Point.

## INTRODUCTION

SCCs are eight-digit codes that describe individual processes. SCCs are used by the AQD and EPA to determine which processes are associated with which air pollutants. SCCs and SAROAD Pollutant Codes are entered on Card 23s, and this links the SCC to the Pollutant Code in the data base.

### **BASIC TIPS FOR ENTERING EIS DATA:**

- 1) Enter data on Coding Forms before typing it into a word processor.
- 2) Do not invent codes. Submittal Files with invalid codes are rejected.
- 3) Left justify characters in alphanumeric fields.
- 4) Right justify numbers in numeric fields.
- 5) Read the "Common Errors" on page 144.
- 6) Enter a decimal point in the Peak Ozone Day data field. All other decimals in EIS fields are "assumed" decimal points and should never be entered.
- 7) Stack Data must be entered for conical refuse burners.
- 8) Procedures for modeling flares may be found in Appendix L.



## EIS CODING MANUAL FORMAT:

- \* EIS fields are displayed in **underlined, arial bold type**.
- \* Additional instructions (such as “units of measure”) are displayed in *italic type*.

**Questions and Answers are in boxes**

**Valid Codes are in boxes**

- \* Examples and Samples are in shaded blocks:

### Example:

If there are four boilers (with NEDS ids 08-14, for example) that discharge ....

- \* Sample Cards are included at the end of each section:

Key Block data	Card Type	Column Numbers
<b><u>SAMPLE CARD 01</u></b>		
1-----2-----3-----4-----5-----6-----7-----8 (column)		
<b><u>123456789012345678901234567890123456789012345678901234567890</u></b>		<b><u>(column)</u></b>
<b><u>192880106777795365</u></b>	<b><u>KI-09151991 124015PI. M BOSS</u></b>	<b><u>31833399990IL &amp; GAS 01A (data)</u></b>
<i>EIS data</i>		

## REQUIREMENTS FOR REPORTING EMISSION INVENTORIES<sup>1</sup>

- 1) Any facility in an attainment area that has the potential (see "allowables" in the state permit) to emit at least 100 tons per year (tpy) or more of any contaminant [including volatile organic compounds (VOC)] for which a National Ambient Air Quality Standard has been issued or any facility in a *marginal, moderate, or serious ozone nonattainment area*<sup>2</sup> that has the potential to emit at least 10 tpy of VOC, 25 tpy of nitrogen oxides (NO<sub>x</sub>), or 100 tpy of carbon monoxide (CO), or any facility that has the potential to emit 50 tpy or more of VOC in an area designated as an Ozone Adjoining Area<sup>3</sup> to a listed marginal, moderate, or serious ozone nonattainment area. If either VOC or NO<sub>x</sub> is emitted at or above the minimum required reporting level, the other pollutant must be included even if it is emitted at levels below the specified cutoffs.
- 2) Any facility defined as a major stationary source of hazardous air pollutants in Section 112(a)(1) of the Federal Clean Air Act.
- 3) In Louisiana, the following facility classes are exempted: None.

Note:

All companies that owned a facility during the reporting year must submit a Certification Statement for the criteria pollutants that were emitted during the portion of the year for which they owned the facility. However, the company that owns a facility at midnight on December 31, has sole responsibility to send an EIS Submittal File to the AQD for the entire reporting year. There may be only *one* Submittal File per facility.

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<sup>1</sup> See LAC 33.III.919

<sup>2</sup> Ozone Nonattainment Parishes: Ascension, Calcasieu, East Baton Rouge, Iberville, Livingston, Pointe Coupee, and West Baton Rouge.

<sup>3</sup> Ozone Adjoining Parishes are: Assumption, Beauregard, Cameron, East Feliciana, Iberville, Jefferson Davis, St. Helena, St. John the Baptist, St. James, St. Landry, St. Martin, Tangipahoa, and West Feliciana.

## FACILITY RECORD

The Facility Record consists of Cards 01-04 and contains information about the identity, type, and location of the facility. All four Cards must be included in every Submittal File.

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### CARD 01

#### Segment 0 Key Block (Columns 1-18)

The “Key Block” data is a logical grouping of several fields; its size varies within each Record type. For example, the Key Block for the Facility Record is 18 characters; the Point Record Key Block is 20 characters; the SCC Record Key Block is 30 characters.

The Segment 0 Key Block consists of the State Code, Parish Code, Air Quality Control Region, EIS Facility id Number, and Date of Record fields.

*May not be blank.*

#### Sample Key Block:

Facility Record ..... **19084010677795365**

#### State Code (Columns 1-2)

Always enter **19** in columns 1-2 on Card 01.

*May not be blank.*

#### Parish Code (Columns 3-6)

The Parish Code field is a four-digit number that identifies each parish. See Appendix A for a list of valid SAROAD Parish Codes.

*May not be blank.*

#### AQCR (Columns 7-9)

Enter the Air Quality Control Region (AQCR) code for the facility. Valid AQCR codes are **019**, **022**, and **106**. See Appendix A for AQCR codes indexed by parish.

*May not be blank.*

#### EIS Facility id Number (Columns 10-13)

Enter the four-digit EIS id Number. EIS Facility ids are unique within each parish. EIS Facility id Numbers are assigned by the AQD only. To have a new EIS Facility id Number assigned, call the E. I. Unit Coordinator at (504) 765-0190.

*EIS Facility id Numbers may not be the same as a “Permit Number” or “CDS id Number”.*

*May not be blank*

**FACILITY RECORD  
CARD 01**

**Date of Record (Columns 14-18)**

The company that owns a facility at midnight on December 31, has sole responsibility to report the EIS data for the facility for that entire reporting year. Therefore, the date of record field must always be **365**. The emissions reported must be the total emissions released from the facility for the entire year.

*May not be blank.*

**(Columns 19-23)**

*Not used—leave blank.*

**User Facility id (Columns 24-35)**

Enter any facility identification code or name that the company may use to describe their facility.

*Entry must be left justified.*

*May be blank.*

**City Code (Columns 36-39)**

Enter the City Code of the city in which the facility is located. If the facility is not in a city, enter the code of the closest city within the same parish. See Appendix B for a list of City Codes.

*May be blank.*

**UTM Zone (Columns 40-41)**

Enter the Universal Transverse Mercator (UTM) Zone in which the facility is located. See Appendix G for a discussion of UTM.

*May not be blank.*

**Valid UTM Zone codes for Louisiana:**

**15** — Facilities west of 90° longitude

**16** — Facilities east of 90° longitude

**Ownership Code (Column 42)**

Enter the NEDS ownership code that best describes the type of facility ownership.

*May not be blank.*

**Valid Ownership Codes:**

**P** = Private

**L** = Local Government

**S** = State Government

**F** = Federal Government

**U** = Utility

**Contact Person (Columns 43-57)**

Enter the name of the person at the facility who is responsible for EIS issues. If no name is given, then enter a position title. Do not enter the name of a consultant, even if that person edited the EIS Submittal File.

*Entry must be left justified.*

*May not be blank.*

**Telephone Number (Columns 58-67)**

Enter the telephone number, including area code, of the person listed in the Contact Person field.

*The entry must be right justified, with no blanks or dashes.*

*May not be blank.*

**Principal Product (Columns 68-77)**

Enter a few words to describe the principal product produced by the facility.

*Entry must be left justified.*

*May not be blank.*

**Card Number (Columns 78-79)**

Always enter **01** in columns 78-79 on Card 01.

*May not be blank.*

**Action Code (Column 80)**

Enter **A** (for Add), if adding the facility to the EIS data base; otherwise, enter **C** (for Change), even if there are no changes on this Card. Do not enter **D** (for Delete) on a Card 01. See Appendix H for a discussion on how to use Action Codes.

*May not be blank.*

**SAMPLE CARD 01**

1	2	3	4	5	6	7	8 (column)
1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890	1234567890123456789012345678901234567890123456789012345678901234567890
192880106777795365	K1-09151991	124015PI. M	BOSS	31833399990IL & GAS	01A	(data)	



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## CARD 02

**Segment 0 Key Block (Columns 1-18)**

Enter Segment 0 Key Block data, as defined on page 7.

*May not be blank.*

**Facility Name and Physical Address (Columns 19-66)**

Enter the facility's physical address. The correct format for a facility's physical address in EIS is: "Facility Name\_Physical Street Address\_City\_State\_Zip\_".

In the 1993 and 1994 EIS Master Files, the AQD has added underscore characters ( \_ ) to the Facility Name and Physical Address fields; therefore, the underscore characters will appear in the data files mailed to facilities. Do not remove these underscore characters. There must always be five underscore characters.

**Example:**

- 1) **XYZ OIL CO. \_511 MAIN ST. \_ \_LA**
- 2) **XYZ OIL CO. \_ROUTE 5, BOX 21\_B. R. \_LA\_70701\_**
- 3) **XYZ OIL CO. \_ \_ \_LA \_ \_**

- 1) Not valid because there are not five delimiters.
- 2) Valid. There are five underscore ( \_ ) delimiters.
- 3) Valid. There are five underscore ( \_ ) delimiters.

Enter the name of the actual physical facility and not the owner company.

If the facility does not have a street address, describe its location (for example, "5 mi. South of Glencoe"). In such cases, enter the zip code of the closest city in the same parish, not the closest zip code zone. Nine-digit zip codes are acceptable but not required. The physical address field is only 48 characters long, so use abbreviations. Use the two character state code for Louisiana, **LA**.

*Entry must be left justified and underscore ( \_ ) delimited.*

*May not be blank.*

**Number of Employees (Columns 67-70)**

Enter the number of persons who are present at the facility. This number should reflect the average number of employees, including contract employees.

*Entry must be right justified.*

*May be blank.*

**FACILITY RECORD  
CARD 02**

**Property Area (Columns 71-76)**

Enter the area of the land occupied by the facility (**in acres**). Note that there is an implied decimal (do not enter a decimal point) between columns 75 and 76. The number in column 76 is the tenths numeral. For example, to code "99.5 acres," enter **000995** not **0099.5**. Always enter a number in column 76 (even if it is a zero).

*May be blank.*

**(Column 77)**

*Not used—leave blank.*

**Card Number (Columns 78-79)**

Always enter **02** in columns 78-79 on Card 02.

*May not be blank.*

**Action Code (Column 80)**

Enter **A** (for Add), if adding the facility to the EIS data base; otherwise, enter **C** (for Change), even if there are no changes on this Card. Do not enter **D** (for Delete) on a Card 02. See Appendix H for a discussion on how to use Action Codes.

*May not be blank.*

**SAMPLE CARD 02**

1	2	3	4	5	6	7	8 (column)
12345678901234567890	12345678901234567890	12345678901234567890	12345678901234567890	12345678901234567890	12345678901234567890	12345678901234567890	(column)
192880106777795365XYZ OIL & GAS_5MS HW6_HDUMA_LA_70360_						0001200105 02A (data)	



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## CARD 03

**Segment 0 Key Block (Columns 1-18)**

Enter Segment 0 Key Block data, as defined on page 7.

*May not be blank.*

**Owner Company Mailing Address (Columns 19-66)**

Enter the owner company mailing address of the entity that owns the facility named on Card 02. The correct format for mailing address is: "Owner Company Name\_Street or PO Box\_City\_State\_Zip\_".

In the 1993 and 1994 EIS Master Files, the AQD has added underscore characters ( \_ ) to the Owner Company Mailing Address field; therefore, the underscore characters will appear in the data files mailed to facilities. Do not remove these underscore characters. There must always be five underscore characters.

The Owner Company Mailing Address field is only 48 characters long, so use abbreviations. Use the two character state code for Louisiana, **LA**.

*Entry must be left justified and underscore delimited.*

*May not be blank.*

**(Columns 67-77)**

*Not used—leave blank.*

**Card Number (Columns 78-79)**

Always enter **03** in columns 78-79 on Card 03.

*May not be blank.*

**Action Code (Column 80)**

Enter **A** (for Add), if adding the facility to the EIS data base; otherwise, enter **C** (for Change), even if there are no changes on this Card. Do not enter **D** (for Delete) on a Card 03. See Appendix H for a discussion on how to use Action Codes.

*May not be blank.*

**SAMPLE CARD 03**

-----1-----	2-----	3-----	4-----	5-----	6-----	7-----	8 (column)
123456789012345678	90123456789012345678	90123456789012345678	90123456789012345678	90123456789012345678	90123456789012345678	90123456789012345678	90 (column)

**192880106777795365XYZ CORP. OFFICE\_EARLHAM ROAD\_REDMOND\_VA\_98052\_**

**03A (data)**



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## CARD 04

**Segment 0 Key Block (Columns 1-18)**

Enter Segment 0 Key Block data, as defined on page 7.

*May not be blank.*

**Air Permit Number (Columns 19-31)**

Enter the state air permit number under which the facility is operating, or the word "GRANDFATHERED," if such designation applies.

*Entry must be left justified.*

**(Column 32)**

*Not used—leave blank.*

**Facility Comment (Columns 33-70)**

Enter any comments that may be useful.

*Entry must be left justified.*

*May be blank.*

**(Columns 71-77)**

*Not used—leave blank.*

**Card Number (Columns 78-79)**

Always enter **04** in columns 78-79 on Card 04.

*May not be blank.*

**Action Code (Column 80)**

Enter **A** (for Add), if adding the facility to the EIS data base; otherwise, enter **C** (for Change), even if there are no changes on this Card. Do not enter **D** (for Delete) on a Card 04. See Appendix H for a discussion on how to use Action Codes.

*May not be blank.*

### SAMPLE CARD 04

-----1-----	2-----	3-----	4-----	5-----	6-----	7-----	8 (column)
12345678901234567890	12345678901234567890	12345678901234567890	12345678901234567890	12345678901234567890	12345678901234567890	12345678901234567890	(column)

1928801067777953652880-07777-01 THE 1995 EIS SUBMITTAL FILE

04A (data)



## POINT RECORD

The Point Record consists of Cards 11-14 and contains data that describes stacks, types and amounts of pollutants emitted, and permit related information. Each facility may have 1-1,295 Point Records.

### CARD 11

#### Segment 1 Key Block (Columns 1-20)

The "Key Block" data is a logical grouping of several fields; its size varies within each Record type. For example, the Key Block for the Facility Record is 18 characters; the Point Record Key Block is 20 characters; the SCC Record Key Block is 30 characters.

The Segment 1 Key Block consists of the Segment 0 Key Block and NEDS Point id.  
*May not be blank.*

#### Sample Key Blocks:

		<u>NEDS id No.</u>
Facility Record.....	<b>190840106777795365</b>	↙
Point Record.....	<b>19084010677779536501</b>	

#### NEDS Point id (Columns 19-20)

The NEDS Point id (or simply "NEDS id") is a field assigned by the facility to uniquely identify an emission point. The NEDS id is generally sequential numbers, **01-99** and alphabetic characters, **AA-ZZ**. The NEDS id field is "alphanumeric," meaning that alphabetic and/or numeric characters may be entered into the field. For example, **K1**, **KG**, **JS**, and **H5** are all valid NEDS ids. Do not use 00 as a NEDS id.

With twenty-six letters and ten numerals, there are  $36^2 - 1$  (or 1,295) possible NEDS ids.

NEDS ids must describe the same equipment from year to year. If the equipment associated with a NEDS id is dismantled or retired, the NEDS id for that equipment should be retired and never reused.

*There cannot be any blanks in this field.*

*May not be blank.*

#### User Point id (Columns 21-23)

Enter any identification code which the facility may use for this NEDS Point.

*Entry must be left justified.*

*May be blank.*

**POINT RECORD  
CARD 11**

**SIC (Columns 24-27)**

Enter the Standard Industrial Classification (SIC) code that best describes the facility. SIC codes can be found in the *Standard Industrial Classifications Manual* (1987). This book may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (Order No. PB 87-100012). Common SIC codes for major source categories are listed in Appendix F.

*May not be blank.*

**(Columns 28-29)**

*Not used—leave blank.*

**UTM Horizontal (Columns 30-33)**

Enter the Horizontal (or “Easting”) Universal Traverse Mercator (UTM) coordinate of the NEDS Point. UTM coordinates can be obtained from USGS maps. Also, a computer program is available on the EIBB that translates latitude/longitude coordinates into UTM coordinates. See Appendix G for a discussion of Universal Transverse Mercator, and see Appendix I for instructions on how to use the EIBB. Note that there is an implied decimal (do not enter a decimal point) between columns 32 and 33. Always enter a number in column 33 (even if it is a zero).

*May not be blank.*

**UTM Vertical (Columns 34-38)**

Enter the Vertical (or “Northing”) Universal Traverse Mercator (UTM) coordinate of the NEDS Point. UTM coordinates can be obtained from USGS maps. Also, a computer program is available on the EIBB that translates latitude/longitude coordinates into UTM coordinates. See Appendix G for a discussion of Universal Transverse Mercator, and see Appendix I for instructions on how to use the EIBB. Note that there is an implied decimal (do not enter a decimal point) between columns 37 and 38. Always enter a number in column 38 (even if it is a zero).

*May not be blank.*

**(Columns 39-51)**

*Not used—leave blank.*

**Annual Throughput (Columns 52-59)**

Enter the Annual Throughput of the NEDS Point (**in weighted percent**). The Annual Throughput field is an eight-column field, of four calendar quarters.

Each calendar quarter contains the weighted percentage of the yearly activity of that quarter. If all activity occurs in one quarter, enter **99** for that quarter and zeros for the other quarters. The total of all four quarters must fall between 95-105%.

*Field must be completely filled in or completely blank.*

*Units = weighted percent*

**Example:**

January-March	April-June	July-September	October-December
<b>00</b>	<b>99</b>	<b>00</b>	<b>00</b>
<b>1) 00990000</b> <b>2) 25252525</b> <b>3) 50000050</b>			

1) This equipment operated entirely from April to June.  
 2) This equipment operated evenly throughout the year.  
 3) This equipment operated from October through March.

### **Operating Rate (Columns 60-64)**

Enter the normal Operating Rate of the equipment. The first two digits are the hours per day; the third digit is the days per week; and the last two digits are the weeks per year. If any part of this field is changed, the entire field must be entered.

For example, the Operating Rate for equipment that operated 24 hours/day, 7 days/week, and 52 weeks/year would be entered as **24752**. If the equipment did not operate for the entire year, do not zero-fill this field or enter blanks, instead enter **00052**.

*Valid values are: 00-24/0-7/01-52*

*Field must be completely filled in, no blanks allowed.*

*May not be blank.*

### **Boiler Capacity (Columns 65-69)**

Enter the boiler input capacity (**in millions of Btu/hour**) before heat transfer. This field may not be blank for NEDS Points that represent a boiler. A "boiler" is defined as a burner, firebox, or heat exchanger, and a means of creating and directing a flow of gases through the unit. Enter **00000**, if the NEDS Point is not a boiler.

*Entry must be right justified.*

*May be blank, if the NEDS Point is not a boiler.*

*Units = millions of Btu/hour*

### **Space Heat (Columns 70-72)**

Enter the percentage of total fuel used for space heating the facility. Note that there is an implied decimal (do not enter a decimal point) between columns 71 and 72. The number in column 73 is the tenths numeral. For example, "8.9%," would be entered as **089** not **8.9**. Always enter a number in column 72 (even if it is a zero).

*May be blank.*





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## CARD 12

**Segment 1 Key Block (Columns 1-20)**

Enter Segment 1 Key Block data, as defined on page 17.

*May not be blank.*

**Stack Data (Columns 21-47)**

The Stack Data field is divided into six sub-fields: Stack Height, Stack Diameter, Stack Temperature, Flow Rate, Velocity, and Plume Height.

**Instructions for reporting Stack Data**

**IF** there is no clear-cut enclosed point of emission (e.g., gas leaks at an oil refinery),

**OR** there is no Stack Height (e.g., burning dumps),

**OR** this NEDS Point is a moving emission point within the facility,

**OR** the pollutants are released into the atmosphere at ambient temperatures through diffusion (e.g., gasoline storage tanks)

**THEN:** enter Stack Temperature, and Plume Height data, *and enter zeros in the Height, Diameter, Flow Rate, and Velocity fields.*

**OTHERWISE:** enter Stack Height, Diameter, Temperature, Flow Rate and Velocity data, *and enter zeros in the Plume Height field.*

**Stack Height (Columns 21-24)**

The Stack Height is the vertical distance (**in feet**) between ground level and the point of emission. In the majority of cases, the exact location of the discharge of pollutants will be known; there will be a stack or some other enclosed, constrained, or physically bounded area where pollutants are emitted. If an estimate of stack height is made, round to the nearest ten feet.

*Valid values are: 000-600*

*Entry must be right justified.*

*Units = feet*

*May not be blank.*

**Stack Diameter (Columns 25-27)**

The Stack Diameter field is the inside diameter (**in feet**) of a round gas exit at the point of emission. The Stack Diameter should be less than 20% of the stack height. Note that there is an implied decimal (do not enter a decimal point) between columns 26 and 27. The number in column 27 is the tenths numeral. Always enter a number in column 27 (even if it is a zero).

*Entry must be right justified.*

*Units = feet*

*May not be blank.*

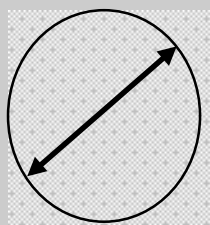
For non-round stack exits, the equivalent Stack Diameter ( $D_e$ ) may be calculated from the cross-sectional area at the point of discharge using this formula:

**POINT RECORD  
CARD 12**

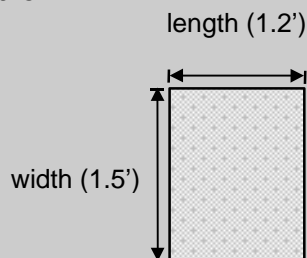
$$D_e = 1.128 * \sqrt{A}$$

A = the cross-sectional area of the non-round stack (in square feet)

**Example:**



Diameter of a Circular Stack = 2R



Equivalent Stack Diameter  
( $D_e$ ) =  $1.128 * \sqrt{(\text{length} * \text{width})}$

A non-round stack with a length of 1.2 feet and a width of 1.5 feet.

$$D_e = 1.128 * \sqrt{(1.2 * 1.5)}$$

$$D_e = 1.128 * 1.341$$

$$D_e = 1.512$$

So enter **015** in the Stack Diameter field.

-not to scale-

**Stack Temperature (Columns 28-31)**

The temperature of the exhaust stream at the gas exit is reported **(in degrees Fahrenheit)** under normal operating conditions. If the stack exit temperature is estimated, estimate to the nearest 50°F. If fuel combustion is not involved in the process, and if the exhaust gas appears to be discharged at ambient air temperatures, then enter 77°F (or the average annual temperature).

If the Plume Height is entered in columns 44-47 and the emission point is a combustion source, then estimate the temperature to the nearest 50°F. If the Plume Height is entered in columns 44-47 and the emission point is not a combustion source, then enter 77°F (or the average annual temperature).

*Valid values are:0000-2000*

*The entry must be right justified.*

*Units = degrees Fahrenheit (°F)*

*May not be blank.*

**Flow Rate (Columns 32-38)**

The Flow Rate is the actual volume of exhaust gas (**in feet<sup>3</sup>/min**) released at the operating temperature of the stack (assume gas pressure is the same as normal atmospheric pressure). When two or more “boilers” discharge into a common stack and each unit is coded on a separate form, the exit gas flow rate corresponding to each boiler is entered on the coding form. If the measured Flow Rate is not available, enter the design or maximum rate.

*Entry must be right justified; spaces allowed*

*Units = cubic feet per minute (feet<sup>3</sup>/min)*

*May not be blank.*

**Velocity (Columns 39-43)**

Enter the exhaust gas Velocity (**in feet/min**) of the NEDS Point. If the actual measured exhaust gas velocity value is not available, use the design or maximum value.

Note that the gas velocity units in EIS (feet/min) differs from the gas velocity units on an Emission Inventory Questionnaire (EIQ) (feet/second). If the velocity data from an EIQ is used in EIS, the units must first be converted. For example, if the velocity on an EIQ is 0.5 feet/second, convert that value to feet/min: 0.5 (feet/second) X 60 (seconds/minute) = 30 (feet/min). So enter **00030** in the EIS Velocity field.

*Entry must be right justified.*

*Units = feet/min (not feet/second).*

*May not be blank.*

**Plume Height (Columns 44-47)**

Enter the Plume Height is a gross estimate (**in feet**).

If there is a physically definable height above ground level where the pollutants are discharged, then enter this value in the Plume Height field. Examples of this class are gasoline storage tanks and uncontrolled grain drying operations where the height of the tank or dryer would be considered the plume height.

*Valid values are: 000-200*

*Entry must be right justified.*

*Units = feet*

*May not be blank.*

Some sources, such as burning dumps, and ground level fugitive emissions do not have discernible emission heights. In such cases, enter zero in column 47. Processes that discharge emissions at ambient temperatures mainly through ground-level leakage or diffusion should also be considered to have a zero plume height.

If the Plume Height is entered and the emission point is a combustion source, then estimate the temperature to the nearest 50°F. If the Plume Height is entered and the emission point is not a combustion source, then enter 77°F in the temperature field.

**POINT RECORD  
CARD 12**

Where there are multiple boilers emitting through a common stack, create separate Point and SCC Records for each boiler. Enter the same Stack Data on each of the 11 Cards in the different Point Records. Use the following criteria to determine which Stack Data to use:

Calculate  $K_i$  for each individual stack using the following equation. Select the stack with the lowest  $K_i$  value, and enter that data for the stack in the appropriate fields on all of the 11 Cards for all the NEDS Points sharing the common stack, then enter the total number of boilers, and total number of stacks, in the comment field on Card 14.

$$K_i = (H_i)(V_i)(T_{si})/Q_i$$

$H_i$  = individual Stack Height (ft)

$V_i$  = individual Flow Rate (ft<sup>3</sup>/min)

$T_{si}$  = individual Stack Temperature (°F)

$Q_i$  = individual emission rate of any common pollutant (tpy)

**Example:**

If three boilers share a common stack, assign unique NEDS ids for each; create Cards 11-14, and 21-25 for each NEDS Point; then calculate  $K_i$  for each stack. Enter the Stack Data of the stack with the smallest  $K_i$  value into the Stack Data fields of all three NEDS Points, then enter same value in the Points with a Common Stack fields of all three NEDS Points

**Points with a Common Stack (Columns 48-51)**

If there is one “emissions source” emitting through a common stack, then leave this field blank. If more than one piece of equipment is attached to a stack, follow the instructions below.

*Field must be completely filled or completely blank.*

**Q:** *If I have several similar boilers that share a common stack, do I still have to create Cards 11-14 and 21-24 for each individual boiler?*

**A:** Yes. Complete Cards 11-14 and 21-25 as usual for the individual boilers, but enter the same Stack Data of the stack with the lowest  $K_i$  value for each.

**Q:** Do the NEDS ids have to be entered in any order?

**A:** Yes. The first NEDS id entered must be the smallest number and the last id must be the largest number. For example, for points **15**, **16**, **26**, **27**, and **99**, 15 is the lowest number, and 99 is the largest number. Thus, the correct entry is: **1599**.

**Q:** What would I enter into the Points with a Common Stack field, if I had the NEDS ids **10**, **L5**, and **KL**?

**A:** Alphabetic characters have a higher value than numerals. Therefore, A > 9, K > A, and T > K. For the example above, enter **10L5**. Other examples:

<u>NEDS ids</u>	<u>Enter</u>
<b>99, A1, JC</b>	<b>99JC</b>
<b>4F, T2, 8S</b>	<b>4FT2</b>

### **(Columns 52-63)**

*Not used—leave blank.*

### **VOC Control Number (Columns 64-67)**

Enter the Louisiana VOC Regulation Control Number for control of the specific VOC process. See Appendix D for a list of VOC Regulation Control Numbers.

*May be blank.*

### **(Columns 68-77)**

*Not used—leave blank.*

### **Card Number (Columns 78-79)**

Always enter **12** in columns 78-79 on Card 12.

*May not be blank.*

### **Action Code (Column 80)**

Enter **A** (for Add), if adding the facility or NEDS Point to the EIS data base. Enter **C** (for Change), if changing anything on this Card. Do not enter a **D** (for Delete) on a Card 12. Enter **[blank]** (for no action), if not changing data on this Card. See Appendix H for a discussion of how to use Action Codes.

*May be blank.*

### **SAMPLE CARD 12**

-----1-----2-----3-----4-----5-----6-----7-----8 (column)
<b>123456789012345678901234567890123456789012345678901234567890 (column)</b>
<b>19288010677779536501003000405000000500000010000</b>
<b>12A (data)</b>



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## CARD 13

**Segment 1 Key Block (Columns 1-20)**

Enter Segment 1 Key Block data, as defined on page 17.

*May not be blank.*

**Pollutant Code (Columns 21-25)**

Enter the SAROAD Pollutant Code of the pollutant being reported.

The AQD only requires that five criteria pollutants and “Total VOC” (43104) be reported, so there must be at least one Card 13 for each NEDS Point. Up to sixteen pollutants per NEDS Point may be reported: the five criteria pollutants, Total VOC, and up to ten species. Every SAROAD pollutant code entered on a Card 13 must also be entered at least once on a Card 23. See also “Pollutant Code” on page 43.

For a complete list of SAROAD Pollutant Codes, see the *SAROAD Parameter Coding Manual*. This book may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161. (#APTD-0633)

*Many valid SAROAD Pollutant Codes are listed in Appendix D.*

*May not be blank.*

<p><b>SAROAD Pollutant Codes for the five Criteria Pollutants (and 43104):</b></p> <p><b>11101</b> Particulate Matter &lt; 10 microns diam. (PM<sub>10</sub>)</p> <p><b>42101</b> Carbon Monoxide (CO)</p> <p><b>42401</b> Sulfur Dioxide (SO<sub>2</sub>)</p> <p><b>42602</b> Nitrogen Oxides (NO<sub>x</sub>)</p> <p><b>12128</b> Lead (Pb)</p> <p><b>*43104</b> Total Volatile Organic Compounds (VOCs)</p> <p>* See Appendix D for a list of organic compounds that are considered “nonparticipants in the formation of ozone”.</p>
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**VOC Speciation**

Although there are only six pollutants that *must* be reported in the EIS, AQD is interested in gathering “speciated VOC” data, where it exists. The same applies to particulate speciation. See Appendix D for a partial list of SAROAD Pollutant Codes of VOC species.

**How to report Total VOCs and Speciated VOCs:**

- 1) Report Total VOCs (43104) by adding up all the separate VOC species and rounding that sum to the nearest ton.
- 2) Round each VOC specie separately to the nearest ton and report each specie on a separate Card 13 (and Card 23).

**POINT RECORD  
CARD 13**

**Example:**

For NEDS Point 14, four separate VOCs are emitted in the amounts: 1.3 tpy, 0.5 tpy, 0.4, and 0.3 tpy; therefore, a 2.5 tpy of Total VOCs were emitted. The 2.5 tpy would be rounded off and reported as 3.0 tpy of Total VOCs (43104). The first VOC would then be rounded and reported as 1.0 tpy, the second VOC would be rounded and reported as 1.0 tpy, and the last two VOCs would round to zero and not reported.

**Q:** *What is VOC Speciation?*

**A:** VOC Speciation is the separate reporting of VOCs that are summed into "Total VOCs".

**Q:** *Am I required to speciate VOCs?*

**A:** No.

**Q:** *If I report speciated VOCs, am I still required to report Total VOCs (43104)?*

**A:** Yes. You always report "Total" VOCs (43104), whether you speciate or not.

**Q:** *If I report speciated VOCs and "Total VOCs," will the AQD count my VOCs twice?*

**A:** No.

**Q:** *If I speciate VOCs, how many species may I report?*

**A:** Ten. You may report a total of sixteen pollutants per NEDS Point: five criteria pollutants, 43104, and up to ten species.

**Q:** *If I am unsure about which SAROAD Pollutant Code to use for a VOC, or if a pollutant code does not exist for a VOC, may I use 43000?*

**A:** No. 43000 is not a valid SAROAD Pollutant Code, and neither is 43100. Never invent codes. See the *SAROAD Parameter Coding Manual*, published by the EPA, for an exhaustive list of SAROAD pollutant codes. (#APTD-0633)



**Permitted Emission Rate (Columns 26-32)**

Enter the “maximum permitted emission rate” (**in lbs/hr**) found in the current state permit. If a NEDS Point is not permitted, or if the permit does not contain a limit for a particular pollutant, leave this field blank. Note that there is an implied decimal (do not enter a decimal point) between columns 30 and 31. The number in column 31 is the tenths numeral, and the number in column 32 is the hundredths numeral. For example, to enter “45.5 lbs/hr,” enter **0004550** not **00045.5**, or **00045**. Always enter numbers in columns 31 and 32 (even if they are zeroes).

*Entry must be right justified.*

*If a state permit does not exist for this pollutant, this field may be blank.*

*Units = lbs/hr*

**Primary Control Equipment (Columns 33-35)**

The “Primary Control Equipment” is any device whose main purpose is reducing emissions of a pollutant. Enter the Control Equipment Code (see Appendix E) that describes the control equipment for this point. If Appendix E does not list a control equipment code for the specific control equipment being used, then substitute the code that most nearly describes that control equipment and include a comment about the substitution in a Card 30 comment.

Only control devices that reduce the uncontrolled emissions normally associated with the process should be reported. Do not report equipment that is a normal part of the source activity even though the quantity of the pollutants emitted may be reduced. For example, the recovery system for coke by-product gases of a coke oven should not be reported as pollution control equipment for VOCs.

If values are entered in the Primary Control Equipment and Control Efficiency fields, and there is no Secondary Control Equipment for that pollutant, enter **000** in the Secondary Control Equipment field.

*The Primary Control Equipment, Secondary Control Equipment, and the Control Efficiency fields must completely filled or completely blank.*

*Entry must be right justified.*

**Secondary Control Equipment (Columns 36-38)**

Secondary control equipment is a device following the primary control equipment in a series and is designed to remove the same pollutant. For example, a settling chamber (or gravity collector) for removing large particles is often followed by an electrostatic precipitator. The precipitator should be reported as secondary control equipment.

For a device installed primarily for the removal of one pollutant that also removes another pollutant, create two Card 13s. See example below.

**POINT RECORD  
CARD 13**

**Example:**

On the first Card 13: enter the pollutant code for the primary pollutant removed; enter the control device code in the Primary Control Equipment field; and enter **000** in the Secondary Control Equipment field.

On the second Card 13: enter the pollutant code for the pollutant that is incidentally removed; enter **000** in the Primary Control Equipment field; and enter the control device code in the Secondary Control Equipment field.

Enter the Control Equipment Code (see Appendix E) that best describes the control equipment on this point. If Appendix E does not list a control equipment code for the control equipment being used, substitute the code that most nearly describes that control equipment and include a comment about the substitution in a Card 30 comment. *The Primary Control Equipment, Secondary Control Equipment, and the Control Efficiency fields must completely filled or completely blank. Entry must be right justified.*

**Estimated Control Efficiency (Columns 39-41)**

Enter the overall collection efficiencies (**in weighted percent**) of all control equipment at the NEDS Point. Assume that the pollutant load entering the control equipment is the normal uncontrolled quantity for that specific process. Note that there is an implied decimal (do not enter a decimal point) between columns 40 and 41. The number in column 41 is the tenths numeral. For example, enter "99.5" as **995**. Always enter a number in column 41 (even if it is a zero).

*The Primary Control Equipment, Secondary Control Equipment, and the Control Efficiency fields must completely filled or completely blank.  
Units = weighted percent*

**Estimated Emissions (Columns 42-48)**

Enter the best estimate of the actual annual controlled emissions (**in tpy**) from the NEDS Point. In determining this emission rate, consideration should be given to: significant control, equipment or facility shutdowns, temporary fuel changes, etc.

Round emissions to the nearest ton. For example, round 0.5-1.0 tpy to **0000001** and round 0.49 tpy or less to **0000000**, or don't submit a Card 13 for that pollutant.

If the emissions were measured, enter the measured value in both the "Estimated Emissions" and "Measured Emissions" fields, and enter **1** in the "Estimation Code" field (column 64).

*Entry must be right justified.*

*May not be blank.*

*Units = tpy*

**Measured Emissions (Columns 49-55)**

Enter the annual controlled emissions (**in tpy**) based on the measured hourly emission rate and the normal operating rate. If emissions were not measured, enter zeros.

If the emissions were measured, enter the measured value in both the "Estimated Emissions" and "Measured Emissions" fields, and enter **1** in the "Estimation Code" field (column 64).

*Entry must be right justified.*

*Zero-fill, if no stack test was done.*

*Units = tpy*

**Allowable Emissions (Columns 56-62)**

Enter the permitted emission rate (**in tpy**) which appears in the current state permit. If the NEDS Point is not permitted by the state or the state permit does not contain a limit for a particular pollutant, leave this field blank. Values above 25,000 tpy will cause a Conditional Error message—see Appendix K for an explanation of error messages.

*Entry must be right justified.*

*May be blank, if there is no state permit or limit for this pollutant.*

*Units = tpy*

**(Column 63)**

*Not used—leave blank.*

**Estimation Code (Column 64)**

Enter the Estimation Code for the method used to determine the Estimated Emissions.

**Valid Estimation Codes:**

- 0** = N/A (*use only if you entered 0000000 in the Estimated Emissions field*)
- 1** = Stack test results or other measurement (*use if you did a stack test*)
- 2** = Material balance
- 4** = Guess
- 5** = Used Federal Factors—AP-42
- 6** = New construction, not operational (*enter zeros for Estimated Emissions*)
- 7** = Facility closed (*enter zeros for Estimated Emissions*)

If emissions were measured, enter the Measured Emission value in both the "Estimated Emissions" and "Measured Emissions" fields, and enter **1** in the "Estimation Code" field.

In editing previous years Submittal Files, the AQD generally changed Estimation Codes from **3** to **5**. Do not use Estimation Code **3**.

*May be blank.*



**(Columns 74-77)**

*Not used—leave blank.*

**Card Number (Columns 78-79)**

**Always enter 13 in columns 78-79 on Card 13.**

*May not be blank.*

**Action Code (Column 80)**

Enter **A** (for Add), if adding the facility or NEDS Point to the EIS data base. Enter **C** (for Change), if changing anything on this Card. A **D** (for Delete) Action Code on Card 13 will delete that one Card 13. Enter **[blank]** (for no action), if not changing data on this Card. See Appendix H for a discussion of how to use Action Codes.

*May be blank.*

### SAMPLE CARD 13

-----1-----2-----3-----4-----5-----6-----7-----8 (column)  
123456789012345678901234567890123456789012345678901234567890 (column)  
1928801067777953650142602 00002220000222 1 13A (data)



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## CARD 14

**Segment 1 Key Block (Columns 1-20)**

Enter Segment 1 Key Block data, as defined on page 17.

*May not be blank.*

**Descriptive Codes for Sources (Column 21)**

Enter the Descriptive Code (see below) that best describes the equipment associated with the NEDS Point.

*May not be blank.*

**Valid Descriptive Codes for Sources:**

**C** = Cooling Towers

**E** = Equipment Leaks

See LAC 33:III.2121 for a description of emission points that should be considered equipment leaks.

**F** = Flares

Any combustion device that operates with a non-enclosed main flame and does not recover heat in a useful form.

**I** = Incinerator

Any combustion device that operates with an enclosed main flame and does not recover heat in a useful form.

**M** = Marine Vapor  
Loading

See LAC33:III.2108 for a description of Emission Points that should be included as Marine Vapor Loading.

**T** = Tanks

**U** = Upsets/Accidental  
Releases

**W** = Wastewater  
emissions

Emission Points include wastewater storage tanks, surface impoundments, drains, junction boxes, lift stations, weirs, and oil-water separators.

**O** = Other

All other types of Emission Points not listed above.

**(Column 22)**

*Not used—leave blank.*

**POINT RECORD  
CARD 14**

**Permit Emission Point id (Columns 23-27)**

Enter the Permit Emission Point id number for the individual NEDS Point in columns 23-27. The Permit Emission Point id can be found on page 1 of the Air Quality Data Sheet of the current state permit or under "Emission Points" in a Small Source Permit.

*May be blank, if there is not a Permit Emission Point id number.*

**(Column 28)**

*Not used—leave blank.*

**Comment (Columns 29-72)**

Enter the "Permit Emission Point Description" from the current state permit. This description can be found next to the Permit Emission Point Number in the permit. If there is no permit for this point, enter a comment that describes the equipment associated with this NEDS Point.

*May be blank, if there is not a state permit for this emissions point.*

**(Columns 73-77)**

*Not used—leave blank.*

**Card Number (Columns 78-79)**

Always enter **14** in columns 78-79 on Card 14.

*May not be blank.*

**Action Code (Column 80)**

Enter **A** (for Add), if adding the facility or NEDS Point to the EIS data base. Enter **C** (for Change), if changing anything on this Card. Do not enter a **D** (for Delete) as the Action Code for a Card 14. Enter **[blank]** (for no action), if not changing data on this Card. See Appendix H for a discussion of how to use Action Codes.

*May be blank.*

**SAMPLE CARD 14**

1	2	3	4	5	6	7	8 (column)
12345678901234567890	12345678901234567890	12345678901234567890	12345678901234567890	12345678901234567890	12345678901234567890	12345678901234567890	(column)
192880106777795365010	001	500 HP NATURAL GAS-FIRED COMPRESSOR ENGINE					14A (data)



## SCC RECORD

The SCC Record consists of Cards 21-25 and contains process-specific information. Each NEDS Point must have at least one SCC Record; up to ten are allowed.

### CARD 21

#### Segment 2 Key Block (Columns 1-30)

The "Key Block" data is a logical grouping of several fields; its size varies within each Record type. For example, the Key Block for the Facility Record is 18 characters; the Point Record Key Block is 20 characters; the SCC Record Key Block is 30 characters.

The Segment 2 Key Block consists of the Segment 1 Key Block and SCC and SCC Sequence Number fields.

*May not be blank.*

#### Sample Key Blocks:

		<u>SCC No.</u>	<u>SCC Sequence No.</u>
Facility Record.....	<b>190840106777795365</b>		
Point Record.....	<b>19084010677779536501</b>		
SCC Record.....	<b>19084010677779536501</b>	<b>102</b>	<b>0050100</b>

#### SCC (Columns 21-28)

Source Classification Codes (SCC) identify processes associated with NEDS Points.

SCCs are no longer included in the EIS Coding Manual. An exhaustive list of emission factors may be found in the *EPA publication AP-42, 5th Edition*. To obtain a copy, call the Federal Government Printing Office at (202)783-3238.

Paper version costs \$56.00.....stock # 055-000-00500-1

CD ROM version costs \$18.00 .....stock # 055-000-00501-0

*Entry must be right justified, with no blanks.*

*May not be blank.*

#### SCC Sequence Number (Columns 29-30)

Where there are multiple SCC Records for a single NEDS Point, and the same SCC is used more than once, assign different SCC Sequence Numbers for each SCC Record. In most cases, one SCC is sufficient to describe a NEDS Point, so one SCC Record is entered. However, up to ten different SCCs may be entered for each NEDS Point. The range of valid SCC Sequence numbers is **00-09**.

*Entry must be right justified, with no blanks.*

*May not be blank.*

**SCC RECORD  
CARD 21**

**Example:**

If one SCC Record is entered for a point, the SCC Sequence Number should be **00**.

If two or more SCC Records is entered, each with different SCC numbers, for the same NEDS Point, the SCC sequence numbers may be **00** for each of the SCC Records.

If two or more SCC Records are entered, each with the same SCC number, the SCC Sequence Numbers would be assigned sequentially: **00, 01, 02...** for each SCC Record.

**(Columns 31-36)**

*Not used—leave blank.*

**Fuel, Process, or Solid Waste Operating Rate (Columns 37-43)**

Enter the average annual fuel, process, or solid waste operating rate. This should be an annual average expressed in the units specified by the SCC number used.

*Entry must be right justified.*

*May be blank.*

*Units = (determined by the SCC)*

**Maximum Design Rate (Columns 44-50)**

Enter the maximum hourly design rate of the most important process equipment, or the upper operating limit that generally would not be exceeded in normal practice. Note that there is an implied decimal (do not enter a decimal point) between columns 47 and 48. The number in column 48 is the tenths numeral, the number in column 49 is the hundredths numeral, and the number in column 50 is the thousandths numeral. For example, to enter “250.950 lbs/hour,” enter **0250950**. Always enter numbers in columns 48-50 (even if they are zeroes).

*May be blank.*

*Units = NEDS units of the SCC for the process, expressed as an hourly rate.*

**Sulfur Content (Columns 51-53)**

Enter the Sulfur Content (**in weighted percent**) for combustion processes. Note that there is an implied decimal (do not enter a decimal point) between columns 51 and 52. The number in column 52 is the tenths numeral, and the number in column 53 is the hundredths numeral. Always enter numbers in columns 52 and 53 (even if they are zeroes).

*Zero-fill*

*May be blank.*

*Units = weighted percent*

**Ash Content (Columns 54-56)**

Enter the Ash Content for combustion processes (**in weighted percent**). Note that there is an implied decimal (do not enter a decimal point) between columns 55 and 56. The number in column 56 is the tenths numeral. Always enter a number in column 56 (even if it is a zero).

*May be blank.*

*Units = weighted percent*

**Heat Content (Columns 57-61)**

Enter the Heat Content for the combustion process.

*Entry must be right justified.*

*May be blank.*

*Units = millions of Btu/SCC.*

**Ash-Sulfur Origin (Column 62)**

Enter the origin of the emission factor information related to the SCC. This field must match the EMF Origin field on Card 23 (column 31).

*Field may not be blank when the Action Code on this Card is A(Add).*

**Valid Ash-Sulfur Codes:**

**F** = Federal

**L** = Local

**S** = State

**Ash-Sulfur Source (Column 63)**

Enter any user-defined code to specify individual local emission factor information. This must match the EMF Source field on Card 23 (column 32). An **H** indicates that the emission is hand-calculated and that emission factor insertion should not take place. Source codes of **F**, **S** or **L** are not allowed; all other letters and numbers are allowed.

*The Ash-Sulfur Source and EMF Source fields must both be H or both be blank.*

*May be blank.*

**(Columns 64-77)**

*Not used—leave blank.*

**Card Number (Columns 78-79)**

Always enter **21** in columns 78-79 on Card 21.

*May not be blank.*

**Action Code (Column 80)**

Enter **A** (for Add), if adding the facility, NEDS Point, or SCC Segment to the EIS data base. Enter **C** (for Change), if changing anything on this Card. A **D** (for Delete) Action Code on Card 21 will delete all Cards with the same NEDS Point as is on the Card 21D. Enter a **[blank]** (for no action), if you are not changing data on this Card. See Appendix H for a discussion of how to use Action Codes.

*May be blank.*

SCC RECORD  
CARD 21

SAMPLE CARD 21							
-----1-----2-----3-----4-----5-----6-----7-----8 (column)							
1234567890123456789012345678901234567890123456789012345678901234567890 (column)							
192880106777795365013100020300	0000007	01050F	21A (data)				

---

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## CARD 22

### **Segment 2 Key Block (Columns 1-30)**

Enter Segment 2 Key Block data, as defined on page 37.

*May not be blank.*

### **Confidentiality (Column 31)**

Enter the code that indicates whether or not process data (Cards 21-25) for this NEDS Point are considered confidential and should not to be released to the public upon request. If this field is blank, then the data are considered *not* confidential by default.

*May be blank.*

<p><b><u>Valid Confidentiality Codes:</u></b></p>
---

<p>1 = Source is confidential</p>
-----------------------------------

<p>2 = Source is not confidential</p>
---------------------------------------

### **Source Code (Column 32)**

Enter the Source Code that identifies the process category for the SCC.

*May be blank.*

<p><b><u>Valid Source Codes:</u></b></p>
--

<p>B = Boiler</p>
-------------------

<p>P = Process</p>
--------------------

<p>C = Other combustion unit</p>
----------------------------------

<p>S = Solid waste</p>
------------------------

### **Source Description (Columns 33-57)**

Enter a brief description of the source; for example, "Oil-fired Boiler" or "Lime kiln production". This field must be coded when the SCC ends in 97, 98, or 99.

*Entry must be left justified.*

*May not be blank, if the SCC ends in 97, 98, or 99.*

### **(Columns 58-77)**

*Not used—leave blank.*

### **Card Number (Columns 78-79)**

Always enter **22** in columns 78-79 on Card 22.

*May not be blank.*

SCC RECORD  
CARD 22

**Action Code (Column 80)**

Enter **A** (for Add), if adding the facility, NEDS Point, or SCC Segment to the EIS data base. Enter **C** (for Change), if changing anything on this Card. Do not enter D (for Delete) as the Action Code for a Card 22. Enter **[blank]** (for no action), if not changing data on this Card. See Appendix H for a discussion of how to use Action Codes.

*May be blank.*

**SAMPLE CARD 22**

-----1-----2-----3-----4-----5-----6-----7-----8 (column)
123456789012345678901234567890123456789012345678901234567890 (column)
1928801067777953650131000203002C500 HP COMPRESSOR ENGINE 22A (data)

## CARD 23

### Segment 2 Key Block (Columns 1-30)

Enter Segment 2 Key Block data, as defined on page 37.

*May not be blank.*

### EMF Origin (Column 31)

Enter the origin of the emission factor information. This must match the Ash-Sulfur Origin field on Card 21 (column 62).

*Field may not be blank when the Action Code on this Card is A(Add).*

#### Valid EMF Origin Codes:

F = Federal

L = Local

S = State

### EMF Source (Column 32)

Enter any user-defined code to specify individual local emission factor information. This must match the Ash-Sulfur Source field on Card 21 (column 63). An **H** indicates that the emission is hand-calculated and that emission factor insertion should not take place. Codes of **F**, **S** or **L** are not allowed; all other letters and numbers are allowed.

*The EMF Source and Ash-Sulfur Source fields must both be **H** or both be blank.*

### Pollutant Code (Columns 33-37, 49-53)

Enter the SAROAD Pollutant Code for the pollutant whose emission factor information is being reported. Every SAROAD pollutant code entered on a Card 13 must also be entered at least once on a Card 23, so there must be at least one Card 23 for each NEDS Point. Up to sixteen pollutants See also "Pollutant Code" on page 27.

*While each Card 23 may accommodate two SAROAD Pollutant Codes, the AQD prefers that only the first (Columns 33-37) be used. One is easier to maintain than two.*

#### Example:

If there are three Card 13s for NEDS Point 01, and the SAROAD Pollutant Codes are: 11101, 42401, 43104, and 42602, then you must create at least three Card 23s, where each of the above pollutant codes are entered on a 23 Card at least once.

-----1-----2-----3-----4-----5-----6-----7-----8 (column)	
123456789012345678901234567890123456789012345678901234567890	(column)
190840106009995365011010090100FH1101	23C (data)
190840106009995365011010090100FH42401	23C (data)
190840106009995365011010090100FH42602	23C (data)
190840106009995365011010090100FH43104	23C (data)

**SCC RECORD  
CARD 23**

**Q:** *If I plan to use the AP-42 emission factor values, do I still have to enter the SAROAD Pollutant Codes in Card 23?*

**A:** Yes. Every SAROAD Pollutant Code that appears in a Card 13 must also appear at least once in a Card 23.

**Emission Factor (Columns 38-46, 54-62)**

Enter the average rate at which a pollutant is released into the atmosphere.

Note that there is an implied decimal (do not enter a decimal point) between columns 43 and 44 (and between columns 59 and 60). The number in column 44 (and column 60) is the tenths numeral. The number in column 45 (and column 61) is the hundredths numeral. The number in column 46 (and column 62) is the thousands numeral. For example, to enter an emissions factor of “eighty-six and one-half,” enter **0000086500**. Always enter numbers for the decimal columns (even if they are zeroes). Always enter numbers in columns 44-46 and 60-62 (even if they are zeroes).

SCCs are no longer included in the EIS Coding Manual; they may be found in a computer file that may be downloaded from the EIBB (see Appendix I).

An exhaustive list of emission factors may be found in the *EPA publication AP-42, 5th Edition*. Call the Federal Government Printing Office: (202)783-3238. Paper version is \$56.00—stock # 055-000-00500-1, CD ROM version is \$18.00—stock # 055-000-00501-0.

*May be blank*

*Units vary according to SCC*

**Ash-Sulfur Code (Columns 47, 63)**

Enter the proper code to indicate whether the ash or sulfur contents are to be used in the calculation of the Estimated Emissions.

**Valid Ash-Sulfur Codes:**

**A** = Ash

**S** = Sulfur

**[blank]** = Neither

**(Columns 48, 64-77)**

*Not used—leave blank*

**Card Number (Columns 78-79)**

Always enter **23** in columns 78-79 on Card 23.

*May not be blank.*



**Action Code (Column 80)**

Enter **A** (for Add), if adding the facility, NEDS Point, or SCC Segment to the EIS data base. Enter **C** (for Change), if changing anything on this Card. A **D** (for Delete) Action Code on Card 23 will delete that one Card 23, but remember that there must always be at least one Card 23 for each NEDS Point. Enter **[blank]** (for no action), if not changing data on this Card. See Appendix H for a discussion of how to use Action Codes.  
*May be blank.*

<b><u>SAMPLE CARD 23</u></b>							
-----1-----2-----3-----			-----4-----5-----6-----7-----8 (column)				
123456789012345678901234567890			1234567890123456789012345678901234567890 (column)				
192880106777795365013100020300F 42602							23A (data)



---



---

## CARD 24

-optional-

### Segment 2 Key Block (Columns 1-30)

Enter Segment 2 Key Block data, as defined on page 37.

*May not be blank.*

### NEDS P7 SCC Comment (Columns 31-56)

Enter any SCC-related comments in this field. This is the left half of the NEDS P7 SCC Comment. Cards 24 and 25 are the left and right halves of one comment.

*Entry must be left justified.*

*Not used—leave blank.*

### (Columns 57-77)

*Not used—leave blank*

### Card Number (Columns 78-79)

Always enter **24** in columns 78-79 on Card 24.

*May not be blank.*

### Action Code (Column 80)

Enter **A** (for Add), if adding the facility, NEDS Point, or SCC Segment to the EIS data base. Enter **C** (for Change), if changing anything on this Card. A **D**(Delete) is not valid for a Card 24. Enter **[blank]** (for no action), if not changing data on this Card. See Appendix H for a discussion of how to use Action Codes.

*May be blank.*

### SAMPLE CARD 24

<div style="border: 1px solid black; padding: 2px; display: inline-block;">           -----1-----2-----3-----         </div>	-----4-----5-----6-----7-----8 (column)
<div style="border: 1px solid black; padding: 2px; display: inline-block;">             123456789012345678901234567890           </div>	12345678901234567890123456789012345678901234567890 (column)
<b>192880106777795365022020020200IF I HAD A COMMENT ABOUT</b>	
	<b>24A (data)</b>



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## CARD 25

-optional-

### Segment 2 Key Block (Columns 1-30)

Enter Segment 2 Key Block data, as defined on page 37.

*May not be blank.*

### NEDS P7 SCC Comment (Columns 31-56)

Enter any SCC-related comments in this field. This is the right half of the NEDS P7 SCC Comment. Cards 24 and 25 are the left and right halves of one comment.

*Entry must be left justified.*

### (Columns 57-77)

*Not used—leave blank.*

### Card Number (Columns 78-79)

Always enter **25** in columns 78-79 on Card 25.

*May not be blank.*

### Action Code (Column 80)

Enter **A** (for Add), if adding the facility, NEDS Point, or SCC Segment to the EIS data base. Enter **C** (for Change), if changing anything on this Card. A **D**(Delete) is not valid for a Card 25. Enter **[blank]** (for no action), if not changing data on this Card. See Appendix H for a discussion of how to use Action Codes.

*May be blank.*

### SAMPLE CARD 25

1	2	3	4	5	6	7	8 (column)
1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890	1234567890 (column)
192880106777795365022020020200THIS SCC, IT WOULD BE HERE							25A (data)



## COMMENT RECORD

The Comment Record consists of one or more 30 Cards and contains comments that were not entered in the other EIS comment fields.

### CARD 30

-optional-

#### Segment 3 Key Block (Columns 1-20)

The "Key Block" data is a grouping of several fields, and its size varies within each Record type. For example, the Key Block for the Facility Record is 18 characters; the Point Record Key Block is 20 characters; the SCC Record Key Block is 30 characters.

The Segment 3 Key Block is identical to the Segment 1 Key Block.  
*May not be blank.*

#### Sample Key Blocks:

Facility Record .....	<b>190840106777795365</b>
Point Record .....	<b>19084010677779536501</b>
SCC Record .....	<b>190840106777795365011020050100</b>
Comment Record .....	<b>19084010677779536501</b>

#### P&R Sequence Number (Columns 21-22)

Each NEDS Point may have up to 99 comments, each comment may be up to 999 lines long, and each line is made up of two halves, left and right. The P&R Sequence Number is a sequential number that identifies different comments, the P&R Line Number is a sequential number that identifies line numbers within comments, and the L/R Comment Flag is a code that distinguishes between left or right half of a line. Valid P&R Sequence Numbers are **01-99**.

*Entry must be right justified, with no blanks.*

*May be blank.*

#### P&R Line Number (Columns 23-25)

Each NEDS Point can have up to 99 comments, each comment may be up to 999 lines long, and each line is made up of two halves: left and right. The P&R Sequence Number is a sequential number that identifies different comments, the P&R Line Number is a sequential number that identifies line numbers within comments, and the L/R Comment Flag is a code that identifies whether a Card 30 is the left or right half of a line. Valid P&R Line Numbers are **001-999**.

*Entry must be right- justified, with no blanks.*

*May be blank.*

**COMMENT RECORD  
CARD 30**

**L/R Comment Flag (Column 26)**

Enter an **L** (for left half) or **R** (for right half) of a comment line. Each half may contain up to 51 characters.

*May be blank.*

**Example:**

<b>1) 190180106777795365AA33001Lleft half of comment 33, line 1</b>	<b>30A</b>
<b>190180106777795365AA33001Rright half of comment 33, line 1</b>	<b>30A</b>
<b>190180106777795365AA33002Lleft half of comment 33, line 2</b>	<b>30A</b>
<b>190180106777795365AA33002Rright half of comment 33, line 2</b>	<b>30A</b>
<b>2) 190180106777795365AA33002</b>	<b>30D</b>
<b>3) 190180106777795365AA33000</b>	<b>30D</b>

1) The four 30A Cards will add two lines of comment number 33 to NEDS Point AA.

2) The Card 30D will delete both left and right halves of comment 33, line 2.

3) The Card 30D will delete any and all lines of comment 33.

**Half Comment (Columns 27-77)**

The Comment Record contains any information which the user might wish to keep in his file and which is not found on the other records. Comment Records store information which explains or supplements the data in Segments 0, 1 and 2.

*Entry must be left justified.*

*May be blank.*

**Types of information appropriate for Comment Records:**

- \* details about clustered equipment
- \* Federal permit numbers
- \* Permit conditions
- \* Pollutant code explanations
- \* List of sources grouped in Point Records
- \* Start-up date for sources under construction

**Card Number (Columns 78-79)**

Always enter **30** in columns 78-79 on Card 30.

*May not be blank.*

**Action Code (Column 80)**

Enter **A** (for Add), if adding the facility, NEDS Point, or Comment Segment to the EIS data base. Enter **C** (for Change), if changing anything on this Card. Enter **[blank]** (for no action), if not changing data on this Card. To **D**(for Delete) a Comment Record, enter one Card 30D with the sequence number and line number of the line you wish to delete, and both left and right halves of the comment will be deleted. To delete all comment lines of a NEDS Point, enter **000** in the P&R Line Number field.

*May be blank.*



SAMPLE CARD 30

-----1-----2-----3-----4-----5-----6-----7-----8 (column)
1234567890123456789012345678901234567890123456789012345678901234567890 (column)

1928801067777933650100001LCOMPRESSOR DOWN FOR 3 WEEKS MAINTENANCE DUE TO VERY30A (data)  
1928801067777933650100001RHEAVY RAIN AND WINDS ON 3- 30- 95. 30A (data)



## GLOSSARY

This Glossary is a new addition to the EIS Coding Manual. EIS field entries are in **bold, underlined type**.

### **Action Code:**

A one-character code (**A**, **C**, or **D**) that is interpreted by the EIS COBOL programs to add, change or delete a Card. See Appendix H for a discussion of Action Codes.

### **AIRS (Aerometric Information Retrieval System):**

An EPA data base of national emissions data. AIRS succeeded the NEDS data base in April, 1990. AIRS contains emissions, compliance, and permit data for stationary sources regulated by the US EPA and state and local air pollution agencies. This information is used by states in preparation of State Implementation Plans, to track the compliance status of point sources subject to various regulatory programs.

### **Allowable Emissions:**

EIS field on Card 13—see page 31.

### **Alphanumeric:**

You may enter either alphabetic and/or numeric data into alphanumeric fields. For example, the NEDS id field is alphanumeric, so **42**, **E3**, and **HN** are all valid NEDS ids.

### **Ambient Air:**

The surrounding atmospheric air.

### **Annual Throughput:**

EIS field on Card 11—see page 18.

### **AQCR:**

Air Quality Control Region (AQCR) is a code that divides Louisiana into three AQCRs. See Appendix A for a list of valid AQCR codes.

### **AQD:**

The Air Quality Division of the Louisiana Department of Environmental Quality.

### **ASCII:**

The American Standard Code for Information Interchange (ASCII) is a code that allows computers to handle all printable characters. In ASCII, characters of the alphabet "A-Z", integers "0-9", and special characters "!@#\$%^&\*(" are all represented by a code number from 0-128. For example, the ASCII code for the uppercase letter (A) is 65.

## Glossary

ASCII Range	Contains	Examples
00-32	Control Characters	Tabs, carriage returns, line feeds,
33-128	Flat ASCII	Letters A-Z, numbers 0-9 (and !@#)\$)
129-255	Meta Data	Application program-specific codes

The EIS COBOL programs cannot process files that contain ASCII characters above code 128. Also see “Flat ASCII” and “File Format”.

### **Ash Content:**

EIS field on Card 21—see page 38.

### **Ash-Sulfur Code:**

EIS field on Card 23—see page 44.

### **Ash-Sulfur Origin:**

EIS field on Card 21—see page 39.

### **Ash-Sulfur Source:**

EIS field on Card 21—see page 39.

### **Baseline Changes:**

EIS field on Card 13—see page 31.

### **Blank or [Blank]:**

A space character.

### **BBS:**

Computer Bulletin Board System See “EIBB”

### **Boiler Capacity:**

EIS field on Card 11—see page 19.

### **Card:**

In EIS, a “Card” is synonymous with “one line of data”. The term originates from the fact that 80-column paper “punch cards” were once the means by which data were input into the Emissions Inventory System. See also “Card Type”.

### **Card 01D:**

A “Card One Delete” is a Card 01 with a **D**(Delete) Action Code. A “Card 01D” would delete all data associated with a facility from the Master File. A “Card 01D” was only allowed for the 1993 reporting year and is not allowed now.

**Card 11D:**

A “Card Eleven Delete” is a Card 11 with a **D**(Delete) Action Code. A “Card 11D” will delete all Cards in the Master File (for a facility) with the same NEDS id.

**Card 21D:**

A “Card Twenty-one Delete” is a Card 21 with a **D**(Delete) Action Code. A “Card 21D” will delete all Cards in the Master File (for a facility and point) with the same NEDS id.

**Card Number:**

EIS field. Synonymous with “Card Type”.

**Card Type:**

There are fourteen Card Types in EIS: 01, 02, 03, 04, 11, 12, 13, 14, 21, 22, 23, 24, 25, and 30. The first digit in a Card Type is the Segment number. For example, the “1” in Card 13 means that this is a Card of Segment 1. See also “Card”.

**CDS:**

The Compliance Data System (CDS) is a data base of permit, compliance, and enforcement data on all permitted and some grandfathered facilities in Louisiana.

**CDS id Number:**

An id number assigned by the AQD to a facility at the time it receives a state permit. (Some grandfathered facilities have also received CDS id Numbers) The field is nine digits long: the first four digits identify the parish in which the facility is located, and the last five digits identify the facility within the parish. The CDS id Number is *usually* analogous to the EIS Number, but the two may not be the same. For example, a facility having a CDS id Number of 0840-07777 *may* have an EIS Number of 0840-7777, but this is not necessarily the case.

**Certification Statement:**

A document submitted to the AQD by facilities each year. In a Certification Statement, facility management certifies the validity of the data in the EIS Submittal Files. See Appendix J for a SAMPLE Certification Statement.

**City Code:**

EIS field on Card 01—see page 8.

**COBOL:**

“Common Business Oriented Language” (COBOL) is a programming language used in some computer systems that handle large data bases. The Emissions Inventory System is a series of computer programs written in the COBOL language.

**Comment:**

Fields on Cards 04, 14, 24, 25, and 30 where facilities may enter comments.

## Glossary

### **Coding Forms:**

Paper forms that graphically present the EIS Cards and fields. Facilities may use Coding Forms as an aid in entering their EIS data into computer Submittal Files. Only facilities with fewer than five NEDS Points may submit their EIS data to the AQD on Coding Form instead of computer Submittal Files.

### **Conditional Error:**

A type of error message generated by EIS COBOL programs. Conditional errors warn of invalid data but do not prevent Submittal Files from merging.

### **Confidentiality:**

EIS field on Card 22—see page 41.

### **Contact Person:**

EIS field on Card 01—see page 9.

### **Data Base:**

A group of related files that are collected and maintained in a structured fashion to facilitate data retrieval and processing.

### **Descriptive Code for Sources:**

EIS field on Card 14—see page 35.

### **Download:**

To receive a file from a remote computer.

### **Edit Error:**

An error in coding an EIS Submittal file. Edit Errors are generated by the PEDMSTR program. An example of a common Edit Error is a non-numeric SIC code. See Appendix K for a complete list of PEDMSTR Edit Errors.

### **EIBB:**

The Emissions Inventory Bulletin Board System (EIBB) is a network of computers that are available for facilities, consultants, or the general public's access electronically via modems. See Appendix I for more information.

### **EIS:**

The "Emissions Inventory System" is a collection of over thirty COBOL computer programs that process Louisiana's point source, criteria air pollutant data base.

### **EIS Facility id:**

EIS field. A number that identifies individual facilities in EIS. EIS Facility id Numbers are assigned by the AQD only and may not be the same as your CDS id Number.

**EIS id:**

Synonymous with “EIS Facility id”.

**E.I. Unit:**

The “Emissions Inventory Unit,” of the Program Management and Support Section of the Air Quality Division of the Louisiana Department of Environmental Quality. The E.I. Unit is responsible for collecting and maintaining the EIS data base.

**E-mail:**

A system that allows computer users to send messages or data files to each other.

**EMF Origin:**

EIS field on Card 23—see page 43.

**EMF Source:**

EIS field on Card 23—see page 43.

**Emission Factor:**

EIS field on Card 23—see page 44.

**Emission Point:**

A single point assigned a NEDS id in EIS. An Emission Point can represent one or more physical pieces of equipment at a facility.

**EPA:**

The United States Environmental Protection Agency.

**Error Report:**

A report generated by one of the EIS programs: PEDMSTR, PFMMSTR, or PVP. Error Reports are generated when a Submittal File contains errors that prevent it from merging into the Master File.

**Error Message:**

An message which indicates that data has been rejected by an EIS COBOL program. See Appendix K for a complete listing of EIS error messages.

**Estimated Control Efficiency:**

EIS field on Card 13—see page 30.

**Estimated Emissions:**

EIS field on Card 13—see page 30.

**Estimation Code:**

EIS field on Card 13—see page 31.

**Facility:**

## **Glossary**

A facility is defined as all emission points, fugitives, area, mobile on a contiguous property and under common ownership.

### **Facility Comment:**

EIS field on Card 04—see page 15.

### **Facility Name and Physical Address:**

EIS field on Card 02—see page 11.

### **Facility Record:**

The EIS Record containing plant related information.

### **Field:**

Subdivision of a record containing a particular item of data. Examples of fields in EIS include State Code, UTM Horizontal, Estimated Emissions, etc.

### **File:**

An organized collection of related records.

### **File Format:**

When work is “Saved” in any commercial software word processor, spreadsheet, etc., the data saved is organized in a computer file in a style unique to that program; that unique style is referred to as the program’s “format”. For example, if you typed an EIS Submittal File using WordPerfect® and saved your work on disk, that disk file would contain the 80-column EIS data, and it would also contain “meta-data” that tells WordPerfect® what font, paper size, etc. to use. EIS cannot process files in commercial word processor or spreadsheet formats. Also see “ASCII” and “Flat ASCII”.

### **Flat ASCII:**

A computer file is said to be in flat ASCII format if it does not contain “meta data” such as is present in files created using commercial application programs: WordPerfect®, Word®, Excel®, Lotus-123®, Paradox®, or any other commercial software product. However, most such programs *can* output (or “Export”) text in flat ASCII format. The EIS COBOL programs consider “Flat ASCII” character to be those ASCII characters in the range 32-128. Also see “ASCII” and “File Format”.

### **Grandfathered:**

Facilities that were completely constructed and operating by June 1969 that have not changed ownership or operations such that the amounts and types of criteria emissions have not changed.

### **Half-Comment:**

EIS field on Card 30—see page 52.

### **Heat Content:**

EIS field on Card 21—see page 39.



**Hierarchical Data Base:**

A type of data base in which records are related in a “parent/child” fashion. In the hierarchical model, each parent may have many children (one-to-many relationship), but each child may have only one parent (many-to-one relationship). In the EIS data base, for example, the SCC Record (Cards 21-25) is subordinate to the Point Record (Cards 11-14), which is subordinate to the Facility Record (Cards 01-04).

**Julian Date:**

A calendar where every day is numbered from **1** (January 1) to **365** (December 31).

In EIS Julian Dates are used to denote the time period for which emissions data are reported. For example, enter **95365** in the Date of Record field for a facility that operated for the entire reporting year 1995. Since 1996 will be a leap year, enter **96366** for a facility that operated for the entire reporting year 1996. The next leap years will be 1996, 2000, 2004, etc.

**Key:**

One or more fields that uniquely identify a record. Keys are used in EIS to sort files and to match transactions (in Submittal Files) with records (in the Master File) when updating the Master File.

**Key Block data:**

The first field in every EIS Card. The size of the Key Block differs within each Segment. For example, the Key Block in Segment 0 is 18 columns long, in Segment 1 it is 20 columns, in Segment 2 it is 30 columns, and in Segment 3 it is 18 columns.

**LDEQ:**

Louisiana Department of Environmental Quality

**Master File:**

A computer file containing all EIS data collected for one calendar year. The Master File is considered the EIS “data base”. The EIS submittal files are collected and merged into the Master File by the AQD annually. Therefore, a new separate Master File is created each year, containing the EIS data for that year.

**Maximum Design Rate:**

EIS field on Card 21—see page 38.

**Measured Emissions:**

EIS field on Card 13—see page 31.

## Glossary

### **Merge:**

When an Submittal File is absorbed into the EIS Master File, it is said to have “merged”.

### **Meta Data:**

Meta data characters are ASCII characters outside of the range considered as “flat ASCII,” i.e., above 128. Characters in computer files that are not part of the “text” of the file. In commercial application program such as WordPerfect® or Microsoft Word®, for example, control characters tell the computer which font and size to use when displaying or printing text. Also see “ASCII” and “File Format”.

### **Modeling Domain:**

An area used by the AQD for atmospheric modeling. See also Appendix G.

### **NEDS:**

“National Emissions Data System” (NEDS) is an emissions data base maintained by EPA in the 1980’s.

### **NEDS P7 SCC Comment:**

EIS field on Cards 24 and 25—see pages 47 and 49.

### **NEDS Point id:**

An alphanumeric id assigned to a one or more pieces of equipment for the purposes of tracking and reporting emissions data to the EIS. NEDS ids are assigned by the facility. See also page 17.

### **Number of Employees:**

EIS field on Card 02—see page 11.

### **Operating Rate:**

EIS field on Card 11—see page 19.

### **Owner Company Mailing Address:**

EIS field on Card 03—see page 13.

### **Ownership Code:**

EIS field on Card 01—see page 8.

### **Ozone Nonattainment Parish:**

Those parishes that have not met the EPA National Ambient Air Quality Standards (NAAQS) for ozone. See Appendix A for a list of the parishes in Louisiana that are classified by the US EPA (as of December, 1995) as being in nonattainment for ozone.

### **Ozone Season Day data:**

EIS field on Card 13—see page 32. Emissions of NO<sub>x</sub>, CO, and VOCs (**in lbs/day**) for a three month Ozone Season Period and in an Ozone Nonattainment parish.

**Ozone Season Period:**

The three month period when ozone formation is at its peak in a locale. In the six-parish Baton Rouge Nonattainment Area, the Ozone Season Period is June-August. In Calcasieu Parish, the Ozone Season Period is May-July.

**P&R:**

“Permits and Registration”

**P&R Line Number:**

EIS field on Card 30—see page 51.

**P&R Sequence Number:**

EIS field on Card 30—see page 51.

**Peak Ozone Season Data:**

See Ozone Season Day Data.

**PEDMSTR:**

One of the EIS COBOL programs. The PEDMSTR program examines EIS Submittal Files and generates an Error Report if it finds Edit Errors. See Appendix K.

**PFMMSTR:**

One of the EIS COBOL programs. The PFMMSTR program examines EIS Submittal Files and generates an Error Report if it finds Structural Errors. See Appendix K.

**Permit Emission Point id:**

EIS field on Card 14—see page 36.

**Permitted Emission Rate:**

EIS field on Card 13—see page 29.

**Point Record:**

The EIS Record that contains point related information.

**Points with a Common Stack:**

EIS field on Card 12—see page 24.

**Pollutant Code:**

EIS field on Cards 13 and 23—see pages 27 and 43.

**Portable Source:**

An emission source that moves or may be transported from one place to another.

## Glossary

### **PreValidation Program (PVP):**

In an attempt to increase the quality of the EIS data base, the AQD has implemented the PreValidation Program (PVP), a new computer program similar to the original PEDMSTR and PFMMSTR programs. The PVP examines EIS Submittal files for errors and generates an Error Report, if it finds any errors. See Appendix K for details on the PVP.

### **Primary Control Equipment:**

EIS field on Card 13—see page 29.

### **Principal Product:**

EIS field on Card 01—see page 9.

### **Program:**

A series of instructions written in a language understandable to a computer. More than thirty individual programs make up the EIS system.

### **Property Area:**

EIS field on Card 02—see page 12.

### **PSD:**

Prevention of Significant Deterioration.

### **PSD Permit:**

A type of permit issued to a facility after a PSD permit review, the most stringent type of permit review. A PSD review is necessary when the project planned has emission increases in excess of those allowed by the regulation and all possible controls have been applied. See LAC 33:III.509

### **Record:**

A record consist of one or more fields of related data. In EIS there are four records, each of which contains data fields of related data.

### **SAROAD:**

The “Storage And Retrieval Of Aerometric Data” (SAROAD) system is a coding system developed by the EPA in the 1970’s for distinguishing between different chemicals.

### **SAROAD Pollutant Code:**

A five-digit code assigned to a pollutant. The first digit determines the “major class” of the pollutant; the second digit determines the “sub-class” of the pollutant; the third digit determines the “family” of the pollutant; the fourth and fifth digits describe up to 99 pollutants under each family. See the *SAROAD Parameter Coding Manual* (#APTD-0633) for an exhaustive list of SAROAD pollutant codes. Also see Appendix D.

**SCC:**

Source Classification Code. A coding scheme created to describe a unique process within a source category. SCCs are used in EIS to associate pollutant emissions to specific processes.

**SCC Record:**

The EIS Record where process information is stored.

**SCC Sequence Number:**

EIS field—see page 37.

**Secondary Control Equipment:**

EIS field on Card 13—see page 29.

**Segment:**

A number given to the four EIS Records: Segment 0 (the Facility Record), Segment 1 (the Point Record), Segment 2 (the SCC Record), and Segment 3 (the Comment Record).

**SIC:**

EIS field on Card 11—see page 18. Standard Industrial Classification (SIC) Code describes a general unit of economic activity.

**SIP:**

State Implementation Plan.

**Solid Waste Operating Rate:**

EIS field on Card 21—see page 38.

**Source Code:**

EIS field on Card 22—see page 41.

**Source Description:**

EIS field on Card 22—see page 41.

**Space Heat:**

EIS field on Card 11—see page 19.

**Speciation:**

See page 27.

## Glossary

### **Structural Error:**

An error in coding an EIS Submittal file. Structural Errors are handled by the PFMMSTR program. A common Structural Error results when a non-numeric SIC code is entered. See Appendix K for a complete listing of PEDMSTR Edit Errors.

### **Sub-Field:**

Several fields in EIS are logically broken down into small sub-fields for ease of explanation. The Stack Data field is an example. The Stack Data field is divided into six sub-fields: Stack Height, Stack Diameter, etc.

### **Submittal File:**

The 80-column, ASCII computer file submitted by facilities to the AQD each year.

### **Sulfur Content:**

EIS field on Card 21—see page 38.

### **TEDI:**

The Toxic Emissions Data Inventory (TEDI) is a computerized data base of the regulated industry's annual reports as required by LAC 33:III.5107 and contains reported actual emissions data from the major sources of toxic air pollutants for all calendar years since 1991.

### **Telephone Number:**

EIS field on Card 01—see page 9.

### **tpy:**

Tons per year.

### **Transaction:**

Each EIS Card (with its Action Code) is examined by the EIS COBOL programs, which determine what type of action (or "transaction") to attempt. For example, a "Card 01A" would be interpreted by the EIS COBOL programs as an "Add Transaction," or an attempt to add data to the Master File.

### **Upload:**

To send a file from a local computer to a distant computer.

### **User Facility id:**

EIS field on Card 01—see page 8.

### **User Point id:**

EIS field—see page 17.

**UTM (Universal Transverse Mercator):**

A standard system of cartographic coordinates that is superior to the latitude/longitude system for the purposes of atmospheric modeling, GIS, etc.

**UTM Horizontal (Easting) Coordinate:**

EIS field name on Card 11—see page 18. Analogous to longitude.

**UTM Vertical (Northing) Coordinate:**

EIS field name on Card 11—see page 18. EIS field name. Analogous to latitude.

**UTM Zone:**

EIS field name on Card 01—see page 8. A subdivision in the UTM map projection scheme. There are ten UTM Zones in the 48 contiguous United States, and Louisiana lies within zones 15 and 16. See Appendix G.

**VOC:**

A Volatile Organic Compound (VOC) is any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the Administrator of the EPA designates as having negligible photochemical reactivity.

**VOC Control Number:**

EIS field on Card 12—see page 25. The Louisiana regulation number for the control of a specific activity that generates VOCs. See also Appendix D for a partial list of VOC Control Numbers.

**VOC Species:**

See page 27.

**Warning:**

A type of Error Message generated by the EIS COBOL programs. A warning will not prevent a Submittal File from merging.

**Zero-filled:**

Entering zeros in the left-most empty columns when a numeric entry contains fewer characters than there are columns in the field. For example, if you entered 100 tpy into the Estimated Emission field, you could enter: “ **100**” or you could zero-fill the field and enter **0000100**. It is good coding practice to always zero-fill numeric fields. When entering a whole number in a field with a decimal point, always zero-fill the columns to the right of the decimal point.





## APPENDIX A

### SAROAD PARISH CODES

<b>Parish Name</b>	<b>Parish Code</b>	<b>AQCR</b>
Acadia	0040	106
Allen	0060	106
<b>Ascension</b>	<b>0180</b>	<b>106</b>
<u>Assumption</u>	<u>0200</u>	<u>106</u>
Avoyelles	0220	106
<u>Beauregard</u>	<u>0320</u>	<u>106</u>
Bienville	0360	022
Bossier	0400	022
Caddo	0500	022
<b>Calcasieu</b>	<b>0520</b>	<b>106</b>
Caldwell	0540	019
<u>Cameron</u>	<u>0560</u>	<u>106</u>
Catahoula	0580	019
Claiborne	0620	022
Concordia	0640	019
De Soto	0760	022
<b>East Baton Rouge</b>	<b>0840</b>	<b>106</b>
East Carroll	0860	019
<u>East Feliciana</u>	<u>0880</u>	<u>106</u>
Evangeline	0920	106
Franklin	1000	019
Grant	1120	106
<u>Iberia</u>	<u>1260</u>	<u>106</u>
<b>Iberville</b>	<b>1280</b>	<b>106</b>
Jackson	1300	022
Jefferson	1340	106
<u>Jefferson Davis</u>	<u>1360</u>	<u>106</u>
Lafayette	1520	106
Lafourche	1560	106
La Salle	1680	019
Lincoln	1720	022
<b>Livingston</b>	<b>1740</b>	<b>106</b>
Madison	1780	019
Morehouse	1920	019

Ozone Nonattainment Parishes in bold type

Adjoining Parishes in underlined type

<b>Parish Name</b>	<b>Parish Code</b>	<b>AQCR</b>
Natchitoches	1980	022

## Appendix A

Orleans	2140	106
Ouachita	2160	019
Plaquemines	2240	106
<b>Pointe Coupee</b>	<b>2260</b>	<b>106</b>
Rapides	2360	106
Red River	2420	022
Richland	2460	019
St. Bernard	2500	106
St. Charles	2520	106
<u>St. Helena</u>	<u>2540</u>	<u>106</u>
<u>St. James</u>	<u>2560</u>	<u>106</u>
<u>St. John the Baptist</u>	<u>2580</u>	<u>106</u>
<u>St. Landry</u>	<u>2600</u>	<u>106</u>
<u>St. Martin</u>	<u>2620</u>	<u>106</u>
St. Mary	2660	106
St. Tammany	2680	106
Sabine	2700	022
<u>Tangipahoa</u>	<u>2840</u>	<u>106</u>
Tensas	2860	019
Terrebonne	2880	106
Union	2920	019
Vermilion	2940	106
Vernon	2960	106
Washington	3060	106
Webster	3080	022
<b>West Baton Rouge</b>	<b>3120</b>	<b>106</b>
West Carroll	3140	019
<u>West Feliciana</u>	<u>3160</u>	<u>106</u>
Winn	3240	022
Portable Sources	7777	
Multiple (no permits)	9999	

**Ozone Nonattainment Parishes in bold type**  
Adjoining Parishes in underlined in

## APPENDIX B

### SAROAD CITY CODES

<b><u>City Name</u></b>	<b><u>City Code</u></b>
Abbeville	0020
Alexandria	0080
Alexandria Southwest	0100
Amelia	0110
Amite City	0120
Anadale	0140
Arcadia	0160
Baker	0240
Baton Rouge	0280
Bayou Cane	0300
Bayou Vista	0310
Berwick	0340
Bogalusa	0380
Bossier City	0420
Breaux Bridge	0440
Bunkie	0460
Buras-Triumph	0480
Church Point	0600
Cooper Road	0650
Covington	0660
Crowley	0680
Delhi	0720
Denham Springs	0740
De Quincy	0780
De Ridder	0800
Donaldsonville	0820
England	0890
Eunice	0900
Farmerville	0940
Ferriday	0960
Franklin	0980
Franklinton	1020
Golden Meadow	1040
Gonzales	1060
Grambling	1100
Gramercy	1110
Gretna	1140
<b><u>City Name</u></b>	<b><u>City Code</u></b>

## Appendix B

Hammond	1160
Harahan	1180
Harvey	1190
Haynesville	1200
Homer	1220
Houma	1240
Jackson	1290
Jeanerette	1320
Jefferson Heights	1380
Jennings	1400
Jonesboro	1420
Jonesville	1430
Kaplan	1440
Kenner	1460
Kentwood	1480
Lafayette	1500
Lake Arthur	1580
Lake Charles	1600
Lake Providence	1620
Laplace	1640
Larose	1660
Leesville	1700
Little Farms	1710
Luling	1750
Lutcher	1760
Mamou	1800
Mansfield	1820
Many	1840
Marksville	1860
Marrero	1865
Metairie	1870
Minden	1880
Monroe	1900
Morgan City	1940
Natchitoches	1960
New Iberia	2000
New Orleans	2020
New Roads	2040
Norco	2060
North Fort Polk	2070
Oakdale	2100
Opelousas	2120
Patterson	2180

<b>City Name</b>	<b>City Code</b>
Pineville	2200

Plaquemine	2220	
Ponchatoula	2280	
Port Allen	2300	
Port Sulphur	2320	
Raceland	2340	
Rayne	2380	
Rayville	2400	
Reserve	2440	
Ruston	2480	
St. Martinville	2640	
Samtown	2720	
Scotlandville	2725	
Seymourville	2730	
Shreveport	2740	
Slidell	2760	
South Fort Polk	2770	
Springhill	2780	
Sulphur	2800	
Tallulah	2820	
Terry Town	2890	
Thibodaux	2900	
Vidalia	2980	
Ville Platte	3000	
Vinton	3020	
Vivian	3040	
Welsh	3100	
Westlake	3180	
West Monroe		3200
Westwego	3220	
Winnfield	3260	
Winnsboro	3280	
Zachary	3300	



## APPENDIX C

### SCCs AND EMISSION FACTORS

Emission factors and SCCs are no longer included in the EIS Coding Manual; they may be found in a computer file that may be downloaded from the EIBB (see Appendix I).

An exhaustive list of emission factors may be found in the *EPA publication AP-42, 5th Edition*. Call the Federal Government Printing Office at: (202)783-3238. (paper version is \$56.00—stock # 055-000-00500-1) (CD ROM version is \$18.00—stock # 055-000-00501-0).





## APPENDIX D

### **ORGANIC COMPOUNDS CONSIDERED NONPARTICIPANTS IN OZONE FORMATION**

<b>SAROAD</b>	<b>Pollutant Name</b>
43201.....	Methane
43202.....	Ethane
43802.....	Methylene chloride (dichloromethane)
43814.....	1,1,1-trichloroethane (methyl chloroform)
43811.....	1,1,2-trichloro 1,2,2-trifluoroethane (CFC-113)
43823.....	Trichlorofluoromethane (CFC-11)
43840.....	Dichlorodifluoromethane (CFC-12)
43844.....	Chlorodifluoromethane (CFC-22)
43821.....	Trifluoromethane (HFC-23)
43841.....	1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114)
43842.....	Chloropentafluoroethane (CFC-115)
43899.....	1,1,1-trifluoro 2,2-dichloroethane (HCFC-123)
43899.....	1,1,1,2-tetrafluoroethane (HFC-134a)
43899.....	1,1-dichloro 1-fluoroethane (HCFC-141b)
43899.....	1-chloro 1,1-difluoroethane (HCFC-142b)
43899.....	2-chloro 1,1,1,2-tetrafluoroethane (HCFC-124)
43899.....	Pentafluoroethane (HFC-125)
43899.....	1,1,2,2-tetrafluoroethane (HFC-134)
43899.....	1,1,1-trifluoroethane (HFC-143a)
43899.....	1,1-difluoroethane (HFC-152a)
43817.....	Perchloroethylene
44101.....	Total Oxidants
43551.....	Acetone and Perfluorocarbon compounds which fall into these classes:

- 1) Cyclic, branched, or linear completely fluorinated alkanes
- 2) Cyclic, branched, or linear completely fluorinated ethers with no unsaturations
- 3) Cyclic, branched, or linear completely fluorinated tertiary amines with no unsaturations, and
- 4) Sulfur containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine

\*See 40 CFR Part 51 (June 16, 1995)

## VOC REGULATION CONTROL NUMBERS

<b>Type of Activity</b>	<b>Control Number: LAC 33:III.</b>
Storage Tanks .....	§2103
VOC Loading .....	§2107
Marine Loading .....	§2108
Oil/Water Separators .....	§2109
Pumps and Compressors .....	§2111
Housekeeping .....	§2113
Waste Gas Disposal .....	§2115
Exemptions .....	§2117
Variances .....	§2119
Fugitive Emission Control .....	§2121
*Fugitive Emission Control In the Baton Rouge Ozone	
Nonattainment Area .....	§2122
Organic Solvents .....	§2123
Vapor Degreasers .....	§2125
Cutback Paving Asphalt .....	§2127
Perchloroethylene Dry-cleaning Systems .....	§2129
Filling of Gasoline Storage Vessels .....	§2131
Gasoline Bulk Plants .....	§2133
Gasoline Bulk Terminals .....	§2135
Gasoline Terminal Vapor-tight Control Procedure .....	§2137
Refinery Vacuum Producing Systems .....	§2139
Refinery Process Unit Turnarounds .....	§2141
Graphic Arts (Printing) .....	§2143
Pharmaceutical Manufacturing Facilities .....	§2145

\*This does not apply to the Calcasieu Ozone Nonattainment Area.

# VOC SPECIES

-partial list-

SAROAD	CAS No.	NAME
43814	71556	1, 1, 1- TRICHLOROETHANE
43820	79005	1, 1, 2- TRICHLOROETHANE
45217	135013	1, 2 DIETHYLBENZENE
45237	488233	1, 2, 3, 4 TETRAMETHYLBENZENE
45225	526738	1, 2, 3- TRIMETHYLBENZENE
45208	95636	1, 2, 4- TRIMETHYLBENZENE
91005	573988	1, 2- DIMETHYL NAPHTHALENE
	934805	1, 2- DIMETHYL- 4- ETHYLBENZENE
45207	108678	1, 3, 5- TRIMETHYLBENZENE
43218	106990	1, 3- BUTADIENE
	2870044	1, 3- DIMETHYL- 2- ETHYLBENZENE
	874419	1, 3- DIMETHYL- 4- ETHYLBENZENE
43322	110634	1, 4 BUTANEDIOL
91008		1, 4&2, 3- DIMETHYL NAPHTHALENES
	1758889	1, 4- DIMETHYL- 2- ETHYLBENZENE
43281	107006	1- BUTYNE
43835	78864	1- CHLOROBUTANE
90014	872059	1- DECENE
43313		1- ETHOXY- 2- PROPANOL
90057	592767	1- HEPTENE
43245	592416	1- HEXENE
91003	90120	1- METHYL NAPHTHALENE
99913		1- METHYL- 2- ETHYLBENZENE
	1074175	1- METHYL- 2- PROPYLBENZENE
99912		1- METHYL- 3- ETHYLBENZENE
99917		1- METHYL- 3- ISOPROPYLBENZENE
	1074437	1- METHYL- 3- PROPYLBENZENE
99916		1- METHYL- 3N- PROPYLBENZENE
43299		1- METHYLCYCLOHEXENE
43269	124118	1- NONENE
43224	109671	1- PENTENE
90032	821954	1- UNDECENE
45703		2, 2 DICHLORONITROANILINE
43287	590738	2, 2 DIMETHYLHEXANE
43222	463821	2, 2 DIMETHYLPROPANE
43912	540841	2, 2, 4- TRIME- PENTANE
43250	540841	2, 2, 4- TRIMETHYLPENTANE
98033		2, 2, 5- TRIMETHYLHEXANE
43291	75832	2, 2- DIMETHYLBUTANE
43274	565593	2, 3 DIMETHYL PENTANE
43234	563780	2, 3 DIMETHYL- 1- BUTENE
43276	79298	2, 3 DIMETHYLBUTANE
90006		2, 3 DIMETHYLHEPTANE
43290		2, 3 DIMETHYLHEXANE
99908		2, 3 DIMETHYLOCTANE
43280		2, 3, 3 TRIMETHYLPENTANE
43252	565753	2, 3, 4- TRIMETHYLPENTANE

SAROAD	CAS No.	NAME
90002		2, 3, 5- TRIMETHYLHEXANE
90003		2, 4 DIMETHYLHEPTANE
99910	4032944	2, 4 DIMETHYLOCTANE
98054	107391	2, 4, 4- TRIMETHYL- 1- PENTENE
90009		2, 4, 5- TRIMETHYLHEPTANE
43277		2, 4- DIMETHYLHEXANE
43247	108087	2, 4- DIMETHYLPENTANE
90005		2, 5 DIMETHYLHEPTANE
43278	592132	2, 5- DIMETHYLHEXANE
99909		2, 6 DIMETHYLOCTANE
91006	581420	2, 6- DIMETHYL NAPHTHALENE
43312	112345	2- (2- BUTOXYETHOXY) - ETHANOL
43391		2- BUTYLTETRAHYDROFURAN
43282	503173	2- BUTYNE
43318	104767	2- ETHYL HEXANOL
43279	760214	2- ETHYL- 1- BUTENE
45503	98011	2- FURFURAL
43285		2- HEXENE
43910	75285	2- ME- PROPANE
43263	591764	2- METHYL HEXANE
91002	91576	2- METHYL NAPHTHALENE
43225	563462	2- METHYL- 1- BUTENE
98040	763291	2- METHYL- 1- PENTENE
43228	513359	2- METHYL- 2- BUTENE
43284	625274	2- METHYL- 2- PENTENE
43563	7379126	2- METHYL- 3- HEXANONE
43911	78784	2- METHYL- BUTANE
99918		2- METHYLDECANE
43296	592278	2- METHYLHEPTANE
90008		2- METHYLOCTANE
43229	107835	2- METHYLPENTANE
90040	562492	3, 3 DIMETHYLPENTANE
99911		3, 4 DIMETHYLOCTANE
90004		3, 5 DIMETHYLHEPTANE
43271		3, 5, 5- TRIMETHYLHEXANE
43836		3- (CHLOROMETHYL) - HEPTANE
98041		3- HEPTENE
43230	96140	3- METHYL PENTANE
43223	563451	3- METHYL- 1- BUTENE
43211	760203	3- METHYL- 1- PENTENE
43270	922612	3- METHYL- T- 2- PENTENE
43253	589811	3- METHYLHEPTANE
43298		3- METHYLHEPTANE
43295	589344	3- METHYLHEXANE
90015		3- METHYLOCTANE
46111	101779	4, 4- METHYLENE DIANILINE
90007	691372	4- METHYL- 1- PENTENE
43293	27236460	4- METHYL- T- 2- PENTENE
46114	100618	4- METHYLANILINE
43297	589537	4- METHYLHEPTANE
90016		4- METHYLOCTANE
45241	768569	4- PHENYL- 1- BUTENE

SAROAD	CAS No.	NAME
43256	80568	A- PINENE
46706	83329	ACENAPHTHENE
46705	208968	ACENAPHTHYLENE
43503	75070	ACETALDEHYDE
43404	64197	ACETIC ACID
43604	108247	ACETIC ANHYDRIDE
43551	67641	ACETONE
43206	74862	ACETYLENE
43505	107028	ACROLEIN
43407	79107	ACRYLIC ACID
43704	107131	ACRYLONITRILE
43409	124049	ADIPIC ACID
43132		ALIPHATICS
43570		ALKENE KETONE
46103	82451	AMINOANTHRAQUINONE
45701	62533	ANILINE
46725	191264	ANTHANTHRENE
46709	120127	ANTHRACENE
46102	84651	ANTHRAQUINONE
90052		B- PHELLANDRENE
43257	127913	B- PINENE
45501	100527	BENZALDEHYDE
45201	71432	BENZENE
46716	56553	BENZO (A) ANTHRACENE
46719	50328	BENZO (A) PYRENE
46717	205992	BENZO (B) FLUORANTHENE
46724	192972	BENZO (E) PYRENE
46721	191242	BENZO (G, H, I) PERYLENE
46718	207089	BENZO (K) FLUORANTHENE
46735	195197	BENZO(C) PHENANTHRENE
46714		BENZO(G, H, I) FLUORANTHENE
45402	65850	BENZOIC ACID
46742		BENZOPYRENES
46602	95169	BENZOTHAZOLE
45810	100447	BENZYL CHLORIDE
45226	92524	BIPHENYL
45330	90437	BIPHENYLOL
45704	1817738	BROMDINITROANILINE
45705		BROMDINITROBENZENE
43213	106989	BUTENE
43472		BUTOXYBUTENE
43337	112345	BUTOXYETHOXYETHANOL
43469	124174	BUTOXYETHOXYETHANOL ACETATE
43440	141322	BUTYL ACRYLATE
45235	104518	BUTYL BENZENE
45455	136607	BUTYL BENZOATE
43379	112345	BUTYL CARBITOL
43308	111762	BUTYL CELLOSOLVE
45477	85687	BUTYLBENZYLPHTHALATE
90101	1678939	BUTYLCYCLOHEXANE
45456		BUTYLISOPROPYLPHTHALATE
43510	123728	BUTYRALDEHYDE

## Appendix D

<b>SAROAD</b>	<b>CAS No.</b>	<b>NAME</b>
<b>99101</b>		<b>C- 1 COMPOUNDS</b>
<b>99110</b>		<b>C- 10 COMPOUNDS</b>
<b>99111</b>		<b>C- 11 COMPOUNDS</b>
<b>99112</b>		<b>C- 12 COMPOUNDS</b>
<b>99113</b>		<b>C- 13 COMPOUNDS</b>
<b>99114</b>		<b>C- 14 COMPOUNDS</b>
<b>99115</b>		<b>C- 15 COMPOUNDS</b>
<b>99116</b>		<b>C- 16 COMPOUNDS</b>
<b>99117</b>		<b>C- 17 COMPOUNDS</b>
<b>99118</b>		<b>C- 18 COMPOUNDS</b>
<b>99119</b>		<b>C- 19 COMPOUNDS</b>
<b>99102</b>		<b>C- 2 COMPOUNDS</b>
<b>98035</b>	<b>592438</b>	<b>C- 2- HEXENE</b>
<b>90013</b>		<b>C- 2- OCTENE</b>
<b>99120</b>		<b>C- 20 COMPOUNDS</b>
<b>99121</b>		<b>C- 21 COMPOUNDS</b>
<b>99122</b>		<b>C- 22 COMPOUNDS</b>
<b>99123</b>		<b>C- 23 COMPOUNDS</b>
<b>99124</b>		<b>C- 24 COMPOUNDS</b>
<b>99125</b>		<b>C- 25 COMPOUNDS</b>
<b>99126</b>		<b>C- 26 COMPOUNDS</b>
<b>99127</b>		<b>C- 27 COMPOUNDS</b>
<b>99128</b>		<b>C- 28 COMPOUNDS</b>
<b>99129</b>		<b>C- 29 COMPOUNDS</b>
<b>99103</b>		<b>C- 3 COMPOUNDS</b>
<b>43283</b>		<b>C- 3- HEXENE</b>
<b>99130</b>		<b>C- 30 COMPOUNDS</b>
<b>99131</b>		<b>C- 31 COMPOUNDS</b>
<b>99132</b>		<b>C- 32 COMPOUNDS</b>
<b>99133</b>		<b>C- 33 COMPOUNDS</b>
<b>99134</b>		<b>C- 34 COMPOUNDS</b>
<b>99135</b>		<b>C- 35 COMPOUNDS</b>
<b>99136</b>		<b>C- 36 COMPOUNDS</b>
<b>99137</b>		<b>C- 37 COMPOUNDS</b>
<b>99138</b>		<b>C- 38 COMPOUNDS</b>
<b>99139</b>		<b>C- 39 COMPOUNDS</b>
<b>99104</b>		<b>C- 4 COMPOUNDS</b>
<b>99140</b>		<b>C- 40 COMPOUNDS</b>
<b>99141</b>		<b>C- 41 COMPOUNDS</b>
<b>99142</b>		<b>C- 42 COMPOUNDS</b>
<b>99143</b>		<b>C- 43 COMPOUNDS</b>
<b>99105</b>		<b>C- 5 COMPOUNDS</b>
<b>99106</b>		<b>C- 6 COMPOUNDS</b>
<b>99107</b>		<b>C- 7 COMPOUNDS</b>
<b>43115</b>		<b>C- 7 CYCLOPARAFFINS</b>
<b>99108</b>		<b>C- 8 COMPOUNDS</b>
<b>43116</b>		<b>C- 8 CYCLOPARAFFINS</b>
<b>43138</b>		<b>C- 8 OLEFINS</b>
<b>99109</b>		<b>C- 9 COMPOUNDS</b>
<b>43117</b>		<b>C- 9 CYCLOPARAFFINS</b>
<b>45110</b>		<b>C10 AROMATIC</b>
<b>43125</b>		<b>C10 OLEFINS</b>

<b>SAROAD</b>	<b>CAS No.</b>	<b>NAME</b>
43135		C10 PARAFFINS
45111		C10H12
43153		C10H16
43396		C10H16O
43146		C11 OLEFINS
45113		C11H10
45610		C11H14O
43147		C12 OLEFINS
43152		C12H22
91013		C13- BRANCHED ALKANE
91014		C14- BRANCHED ALKANE
91015		C15- BRANCHED ALKANE
43137		C16 BRANCHED ALKANE
91007		C16- BRANCHED ALKANE
46711		C2 ALKYL INDAN
43126		C2 CYCLOHEXANE
46729		C2- ALKYL- ANTHRACENES
46739		C2- ALKYL- BENZANTHRACENES
46740		C2- ALKYL- BENZOPHENANTHRENE
46741		C2- ALKYL- CHRYSENES
46730		C2- ALKYL- PHENANTHRENE
46746		C2- ALKYL NAPHTHALENE
43127		C3 CYCLOHEXANE
45250		C3- ALKYLSTYRENE
45109		C3/C4/C5 ALKYL BENZENES
43129		C4 SUBSTITUTED CYCLOHEXANE
43467		C4 SUBSTITUTED CYCLOHEXANONE
45303		C4- ALKYLPHENOLS
45248		C4- ALKYLSTYRENES
91016		C4- BENZENE
43128		C5 CYCLOHEXANE
43459		C5 ESTER
43143		C5 OLEFIN
43144		C5 PARAFFIN
43145		C5 PARAFFIN/OLEFIN
43130		C5 SUBSTITUTED CYCLOHEXANE
45245		C5- ALKYL BENZENES
45246		C5- ALKYL BENZENES (UNSAT. )
45304		C5- ALKYLPHENOLS
91009		C5- BENZENE
91012		C5- CYCLOHEXANE
91011		C5- ENE
43399		C5H10O
43289		C6 OLEFINS
43131		C6 SUBSTITUTED CYCLOHEXANE
45247		C6- ALKYL BENZENE
90019		C6H18O3SI3
		C6H6 ISOMER
43294		C7 OLEFINS
43142		C7 PARAFFINS
45249		C7- ALKYL BENZENE
43140		C7- C16 PARAFFINS

SAROAD	CAS No.	NAME
43154		C7H12
43395		C7H12O
43141		C8 PARAFFIN
45310		C8 PHENOLS
43149		C8H14
90020		C8H24O4SI4
43124		C9 OLEFINS
43136		C9 PARAFFIN
45311		C9 PHENOLS
90050	5794036	CAMPHERE
43779	105602	CAPROLACTAM
43377	111900	CARBITOL
43934	75150	CARBON SULFIDE
43804	56235	CARBON TETRACHLORIDE
43933	433581	CARBONYL SULFIDE
90130	87445	CARYOPHYLLENE
43311	110805	CELLOSOLVE
43452	111159	CELLOSOLVE ACETATE
45801	108907	CHLOROBENZENE
43840	75456	CHLORODIFLUOROMETHANE
43803	67663	CHLOROFORM
43842	76153	CHLOROPENTAFLUOROETHANE
43862	126998	CHLOROPRENE
43845	75729	CHLOROTRIFLUOROMETHANE
46715	218019	CHRYSENE
90038	624293	CIS- 1, 4 DIMETHYLCYCLOHEXANE
43217	590181	CIS- 2- BUTENE
43227	627203	CIS- 2- PENTENE
46726	191071	CORONENE
46210	8001589	CREOSOTE
45605	1319773	CRESOL
43515	123739	CROTONALDEHYDE
45210	98828	CUMENE (ISOPROPYL BENZENE)
43248	110827	CYCLOHEXANE
43317	108930	CYCLOHEXANOL
43561	108941	CYCLOHEXANONE
43273	110838	CYCLOHEXENE
46734	27208373	CYCLOPENTA(C, D) PYRENE
46731		CYCLOPENTA- ANTHRACENES
46732		CYCLOPENTA- PHENANTHRENE
43242	287923	CYCLOPENTANE
43292	142290	CYCLOPENTENE
90033		CYCLOPENTYLCYCLOPENTANE
90053	5989275	D- LIMONENE
46753	91178	DECALINS
99933		DENATURANT
45230		DI(ETHYLPHENYL) ETHANE
45470		DI- C8 ALKYL PHTHALATE
43320	123422	DIACETONE ALCOHOL
46743		DIBENZANTHRACENES
46722	53703	DIBENZO(A, H) ANTHRACENE
46745		DIBENZOPYRENE



SAROAD	CAS No.	NAME
46744		DIBENZPHENANTHRENES
43372	142961	DIBUTYL ETHER
45452	84742	DIBUTYL PHTHALATE
45808	2531226	DICHLOROBENZENES
43823	75718	DICHLORODIFLUOROMETHANE
43802	75092	DICHLOROMETHANE
43841	76142	DICHLOROTETRAFLUORETHANE
98062		DIETHYLCYCLOHEXANE
43373	111466	DIETHYLENE GLYCOL
90110		DIETHYLMETHYLCYCLOHEXANES
46751		DIHYDRONAPHTHALENE
46204		DIHYDROXYNAPHTHALENEDIONE
45236		DIISOPROPYL BENZENE
43780		DIMETHYL ALKYL AMINES
43450	68122	DIMETHYL FORMAMIDE
46703	28804888	DIMETHYL NAPHTHALENE
45451	131113	DIMETHYL PHTHALATE
45450	120616	DIMETHYL TEREPHTHALATE
45320		DIMETHYLBENZYLALCOHOL
90060	79298	DIMETHYLBUTANE
43471		DIMETHYLBUTANEDI OATE
90061		DIMETHYLBUTENE
90114		DIMETHYLBUTYLCYCLOHEXANE
43565		DIMETHYLCYCLOBUTANONE
98059		DIMETHYLCYCLOHEXANE
90064		DIMETHYLCYCLOPENTANE
90065		DIMETHYLCYCLOPENTENES
90074		DIMETHYLDECANE
43350	115106	DIMETHYLETHER
45404		DIMETHYLETHYLBENZOIC ACID
90069		DIMETHYLETHYLCYCLOHEXANE
98091		DIMETHYLHEPTANES
43333		DIMETHYLHEPTANOL
90068		DIMETHYLHEXADIENE
43476		DIMETHYLHEXANEDI OATE
90067		DIMETHYLHEXANES
43286		DIMETHYLHEXENE
46750		DIMETHYLINDANS
46752		DIMETHYLINDENE
46115		DIMETHYLNAPHTHYRIDINE
90076		DIMETHYLNONANES
90070		DIMETHYLOCTANES
43332	106218	DIMETHYLOCTANOL
90124		DIMETHYLOCTENES
90112		DIMETHYLOCTYNE
90062		DIMETHYLPENTANE
43477		DIMETHYLPENTANEDI OATE
43331	10143234	DIMETHYLPENTANOL
90063		DIMETHYLPENTENE
90071		DIMETHYLUDECANE
45232	103297	DIPHENYL ETHANE
45454	131168	DIPROPYL PHTHALATE

SAROAD	CAS No.	NAME
43374	106627	DIPROPYLENE GLYCOL
45229	1321740	DIVINYL BENZENE
90001	112414	DODECENE
90126	112958	EICOSANE
43863	106898	EPICHLOROHYDRIN
43105		ESOMERS OF HEXANE
	637923	ETBE
	637923	ETBE
43202	74840	ETHANE
43777	141435	ETHANOLAMINE
43433	141786	ETHYL ACETATE
43438	140885	ETHYL ACRYLATE
43302	64175	ETHYL ALCOHOL
43812	75003	ETHYL CHLORIDE
43351	60297	ETHYL ETHER
43902	75081	ETHYL MERCAPTAN
45228		ETHYL STYRENE
45233		ETHYL- PHENYL- PHENYL- ETHANE
43721	75057	ETHYLAMINE
45203	100414	ETHYLBENZENE
90086		ETHYLBICYCLOHEPTANE
43288	1678917	ETHYLCYCLOHEXANE
98057	1640897	ETHYLCYCLOPENTANE
90079		ETHYLCYCLOPENTENE
45243		ETHYLDIMETHYLBENZENE
90089		ETHYLDIMETHYLCYCLOHEXANE
90129		ETHYLDIMETHYLOCTANE
90087		ETHYLDIMETHYLPENTANE
45302		ETHYLDIMETHYLPHENOL
43203	74851	ETHYLENE
43837	106934	ETHYLENE DIBROMIDE
43815	107062	ETHYLENE DICHLORIDE
43370	107211	ETHYLENE GLYCOL
43601	75218	ETHYLENE OXIDE
43778		ETHYLENEAMINES
43392		ETHYLFURAN
90084		ETHYLHEPTANE
98082		ETHYLHEPTENE
90081		ETHYLHEXANE
43473		ETHYLHEXANOATE
46754		ETHYLINDAN
98106		ETHYLISOPROPYL ETHER
90083		ETHYLMETHYLCYCLOHEXANES
90080		ETHYLMETHYLCYCLOPENTANE
90082		ETHYLMETHYLHEXANE
90085		ETHYLMETHYLOCTANE
90077		ETHYLOCTANE
90075		ETHYLOCTENE
90078		ETHYLPENTENE
90090		ETHYLPROPYLCYCLOHEXANES
45238		ETHYLTOLUENE
46710	206440	FLUORANTHENE

SAROAD	CAS No.	NAME
46707	86737	FLUORENE
43502	50000	FORMALDEHYDE
43403	64186	FORMIC ACID
45604	98000	FURFURYL ALCOHOL
43380	56815	GLYCEROL
43368		GLYCOL
43367	111466	GLYCOL ETHER
43513	107222	GLYOXAL
90125	629947	HENEICOSANE
90059	5910859	HEPTADIENAL
43232	142825	HEPTANE
43264		HEPTENE
90030	544763	HEXADECANE
43410	57103	HEXADECANOIC ACID
90058	142836	HEXADIENAL
43843	76164	HEXAFLUOROETHANE
91001	541059	HEXAMETHYLCYCLOTRISILOXANE
43776	124094	HEXAMETHYLENEDIAMINE
43512	66251	HEXANAL
43231	110543	HEXANE
91010	56291	HEXENAL
90056		HEXENE
43371	107415	HEXYLENE GLYCOL
90037		HEXYNE
98044	496117	INDANE
46712	95136	INDENE
46720	193395	INDENO(1, 2, 3- CD) PYRENE
43221	78784	ISO PENTANE
43214	75285	ISO- BUTANE
43304	67630	ISO- PROPYL ALCOHOL
43330	123513	ISOAMYL ALCOHOL
43446	110190	ISOBUTYL ACETATE
43468	106638	ISOBUTYL ACRYLATE
43306	78831	ISOBUTYL ALCOHOL
43451	297858	ISOBUTYL ISOBUTYRATE
99915	538932	ISOBUTYLBENZENE
	538932	ISOBUTYLBENZENE
43215	115117	ISOBUTYLENE
43511	78842	ISOBUTYRALDEHYDE
43120		ISOMERS OF BUTENE
45105		ISOMERS OF BUTYLBENZENE
45112		ISOMERS OF C10H10
43150		ISOMERS OF C10H18
43151		ISOMERS OF C11H20
43148		ISOMERS OF C9H16
43109		ISOMERS OF DECANE
45106		ISOMERS OF DIETHYLBENZENE
43111		ISOMERS OF DODECANE
45104		ISOMERS OF ETHYLTOLUENE
43155		ISOMERS OF HEPTADECANE
43106		ISOMERS OF HEPTANE
43108		ISOMERS OF NONANE

SAROAD	CAS No.	NAME
43156		ISOMERS OF OCTADECANE
43107		ISOMERS OF OCTANE
43114		ISOMERS OF PENTADECANE
43122		ISOMERS OF PENTANE
43121		ISOMERS OF PENTENE
45108		ISOMERS OF PROPYL BENZENE
43113		ISOMERS OF TETRADECANE
43112		ISOMERS OF TRIDECANE
43110		ISOMERS OF UNDECANE
45102	1330207	ISOMERS OF XYLENE
43243	78795	ISOPRENE
43444	108214	ISOPROPYL ACETATE
90128		ISOPROPYLCYCLOHEXANE
90116		ISOPROPYLCYCLOPENTANE
90111		ISOPROPYLMETHYLCYCLOHEXANE
98056	590863	ISOVALERALDEHYDE
43119		LACTOL SPIRITS
90117	5989275	LIMONENE
45806	541731	M DICHLOROBENZENE
45218	141935	M DIETHYLBENZENE
45212	620144	M ETHYLTOLUENE
45205	108383	M XYLENE
90010		M XYLENE AND P-XYLENE
43603	108316	MALEIC ANHYDRIDE
43201	74828	METHANE
43335		METHOXYETHOXYETHANOL
43569		METHOXYMETHYLBUTANONE
46203		METHOXYNAPHTHALENE
43437	96333	METHYL ACRYLATE
43301	67561	METHYL ALCOHOL
43562	110430	METHYL AMYL KETONE
45227		METHYL BIPHENYL
43559	591786	METHYL BUTYL KETONE
43460		METHYL C11 ESTER
43461		METHYL C12 ESTER
43462		METHYL C13 ESTER
43463		METHYL C14 ESTER
43464		METHYL C15 ESTER
43465		METHYL C19 ESTER
43466		METHYL C20 ESTER
43378	111773	METHYL CARBITOL
43310	109864	METHYL CELLOSOLVE
43801	74873	METHYL CHLORIDE
43470	111820	METHYL DODECANOATE
43552	78933	METHYL ETHYL KETONE
43430	107313	METHYL FORMATE
43514	78988	METHYL GLYOXAL
43560	108101	METHYL ISOBUTYL KETONE
43441	80626	METHYL METHACRYLATE
43455	124107	METHYL M/RISTATE
46702		METHYL NAPHTHALENES
43454	112390	METHYL PALMITATE

SAROAD	CAS No.	NAME
43456	112618	METHYL STEARATE
45221	25013154	METHYL STYRENE
43376	628284	METHYL T-BUTYL ETHER
46727		METHYL-ANTHRACENES
46736		METHYL-BENZANTHRACENES
46737		METHYL-BENZPHENANTHRENE
46738		METHYL-CHRYSENE
46733		METHYL-FLUORANTHRENE
46728		METHYL-PHENANTHRENE
43432	79209	METHYLACETATE
45550		METHYLACETOPHENONE
43209	74997	METHYLACETYLENE (PROPYNE)
43457	109875	METHYLAL
90011		METHYLLALLENE
91004	1334787	METHYLBENZALDEHYDE
90024		METHYLBUTADIENE
90023		METHYLBUTENE
90041	4313579	METHYLCYCLOHEXADIENE
43261	108872	METHYLCYCLOHEXANE
90046		METHYLCYCLOHEXENE
90017		METHYLCYCLOOCTANE
90027		METHYLCYCLOPENTADIENE
43262	96377	METHYLCYCLOPENTANE
43272	693890	METHYLCYCLOPENTENE
46748		METHYLDECALINS
90048		METHYLDECANES
90107		METHYLDECENE
46749		METHYLDIHYDRONAPHTHALENE
90108		METHYLDODECANE
43805	74953	METHYLENE BROMIDE
45730	101688	METHYLENE(B) 4-PHENYLISOCYANATE
90121		METHYLETHYLHEPTANE
43475		METHYLETHYLPENTANOATE
90045		METHYLHEPTANE
43334		METHYLHEPTANOL
98090		METHYLHEPTENE
90044		METHYLHEPTYNE
90039		METHYLHEXADIENE
90043		METHYLHEXANAL
90028		METHYLHEXANE
90029		METHYLHEXENES
46747		METHYLINDANS
90119		METHYLINDENE
90073		METHYLISOPROPYLCYCLOHEXANE
43474		METHYLMETHYLPROPENOATE
90047		METHYLNONANE
90106		METHYLNONENE
90104		METHYLOCTANES
90026		METHYLPENTANE
90025		METHYLPENTENES
90021		METHYLPROPANE
90022		METHYLPROPENE

SAROAD	CAS No.	NAME
90072		METHYLPROPYLCYCLOHEXANES
90102		METHYLPROPYLNONANE
90049		METHYLUNDECANE
43118	64475850	MINERAL SPIRITS
90051	123353	MERCENE
43212	106978	N- BUTANE
43435	138227	N- BUTYL ACETATE
43305	71363	N- BUTYL ALCOHOL
43238	124185	N- DECANE
43255	112403	N- DODECANE
90031	629787	N- HEPTADECANE
43260	629629	N- PENTADECANE
43220	109660	N- PENTANE
90035	25377724	N- PENTENE
98063		N- PENTYLCYCLOHEXANE
45706		N- PHENYLANILINE
43434	109604	N- PROPYL ACETATE
43303	71238	N- PROPYL ALCOHOL
45209	103651	N- PROPYLBENZENE
43259	629594	N- TETRADECANE
43258	629505	N- TRIDECANE
43241	1120214	N- UNDECANE
45101	8030306	NAPHTHA
46701	91203	NAPHTHALENE
45702	98953	NITROBENZENE
90127		NONADECANE
90066		NONADIENE
43235	111842	NONANE
90100	124118	NONENE
43568		NONENONE
45301	25154523	NONYLPHENOL
45805	95501	O- DICHLOROBENZENE
45211	611143	O- ETHYLTOLUENE
45204	95476	O- XYLENE
46202		OCTAHYDROINDENES
90118		OCTAHYDROPENTALENE
43950	556672	OCTAMETHYLCYCLOTETRASILOXANE
43233	111659	OCTANE
43336		OCTANOL
90099		OCTATRIENE
43265	111660	OCTENE
		OTHER
43650		OXYGENATES
45807	106467	P- DICHLOROBENZENE
45213	622968	P- ETHYLTOLUENE
45502	104870	P- TOLUALDEHYDE
45206	106423	P- XYLENE
43408	57103	PALMITIC ACID
43133		PARAFFINS (C16- C34)
43139		PARAFFINS (C2- C7)
43134		PARAFFINS/OLEFINS (C12- C16)
90103		PENTADIENE

SAROAD	CAS No.	NAME
43319	71410	PENTANOL
90054		PENTENYNE
45231		PENTYL BENZENE
90055		PENTYLCYCLOHEXANE
90113		PENTYLIDENECYCLOHEXANE
90036		PENTYNE
43817	127184	PERCHLOROETHYLENE
46723	198550	PERYLENE
46708	85018	PHENANTHRENE
45300	108952	PHENOL
46112	103719	PHENYL ISOCYANATE
46704		PHENYLNAPHTHALENES
45601	85449	PHTHALIC ANHYDRIDE
45750	504609	PIPERYLENE
43381	25322683	POLYETHYLENE GLYCOL
43208	463490	PROPADIENE
43204	74986	PROPANE
43205	115071	PROPENE
90105		PROPENYLCYCLOHEXANE
43504	123386	PROPIONALDEHYDE
43405	79094	PROPIONIC ACID
90120		PROPYLCYCLOHEXANE
43838	26638197	PROPYLENE DICHLORIDE
43369	57556	PROPYLENE GLYCOL
43602	75569	PROPYLENE OXIDE
90109		PROPYLHEPTENES
46713	129000	PYRENE
43314	78922	S- BUTYL ALCOHOL
45216	135988	S- BUTYLBENZENE
43951		SILOXANE
45220	100425	STYRENE
43458		SUBSTITUTED C9 ESTER (C12)
45242		T- 1- PHENYLBUTENE
43216	624646	T- 2- BUTENE
98034	40504557	T- 2- HEXENE
90034	6434782	T- 2- NONENE
90042	13269528	T- 3- HEXENE
45403	100210	TEREPHTHALIC ACID
43123		TERPENES
43309	75650	TERT- BUTYL ALCOHOL
45215	98066	TERT- BUTYLBENZENE
45831		TETRACHLOROBENZENES
43839	75730	TETRAFLUOROMETHANE
45244		TETRAMETHYLBENZENE
90091		TETRAMETHYLCYCLOBUTENE
90098		TETRAMETHYLCYCLOPENTANE
90122		TETRAMETHYLHEXANE
43567		TETRAMETHYLPENTANONE
43952	75763	TETRAMETHYLSILANE
46601	2782914	TETRAMETHYLTHIOUREA
45202	108883	TOLUENE
45731	58849	TOLUENE DIISOCYANATE

## Appendix D

<b>SAROAD</b>	<b>CAS No.</b>	<b>NAME</b>
45732		<b>TOLUENEISOCYANIDE</b>
45740		<b>TOTAL AROMATIC AMINES</b>
43520		<b>TOTAL C2- C5 ALDEHYDES</b>
43226	<b>646048</b>	<b>TRANS- 2- PENTENE</b>
45830		<b>TRICHLOROBENZENES</b>
43824	<b>79016</b>	<b>TRICHLOROETHYLENE</b>
43811	<b>75694</b>	<b>TRICHLOROFLUOROMETHANE</b>
43821	<b>76131</b>	<b>TRICHLOROTRIFLUOROETHANE</b>
43375	<b>112276</b>	<b>TRIETHYLENE GLYCOL</b>
43844	<b>75467</b>	<b>TRIFLUOROMETHANE</b>
43740	<b>75503</b>	<b>TRIMETHYLAMINE</b>
45107	<b>25551137</b>	<b>TRIMETHYLBENZENE</b>
98060	<b>3073663</b>	<b>TRIMETHYLCYCLOHEXANES</b>
43397		<b>TRIMETHYLCYCLOHEXANOL</b>
98058	<b>15890401</b>	<b>TRIMETHYLCYCLOPENTANE</b>
43566		<b>TRIMETHYLCYCLOPENTANONE</b>
90097		<b>TRIMETHYLDECANE</b>
98083		<b>TRIMETHYLDECENE</b>
43822		<b>TRIMETHYLFLUOROSILANE</b>
90094		<b>TRIMETHYLHEPTANES</b>
90115		<b>TRIMETHYLHEXANES</b>
90095		<b>TRIMETHYLHEXENE</b>
46755		<b>TRIMETHYLINDAN</b>
90123		<b>TRIMETHYLNONENE</b>
90096		<b>TRIMETHYLOCTANES</b>
90093		<b>TRIMETHYLPENTADIENE</b>
90092		<b>TRIMETHYLPENTANE</b>
		<b>UNC PEAKS TO CBM ALDEHYDES</b>
		<b>UNC PEAKS TO CBM NON REACT</b>
		<b>UNC PEAKS TO CBM OLEFINS</b>
		<b>UNC PEAKS TO CBM PARAFFINS</b>
		<b>UNC PEAKS TO CBM TOLUENE</b>
		<b>UNC PEAKS TO CBM XYLENE</b>
99999		<b>UNIDENTIFIED</b>
43453	<b>108054</b>	<b>VINYL ACETATE</b>
43860	<b>75014</b>	<b>VINYL CHLORIDE</b>
45401		<b>XYLENE BASE ACIDS</b>



## APPENDIX E

### PRIMARY AND SECONDARY CONTROL EQUIPMENT CODES

<u>Equipment id</u>	<u>Control Device/Method</u>
000	No equipment
001	Wet scrubber - high efficiency
002	Wet scrubber - medium efficiency
003	Wet scrubber - low efficiency
004	Gravity collector - high efficiency
005	Gravity collector - medium efficiency
006	Gravity collector - low efficiency
007	Centrifugal collector - high efficiency
008	Centrifugal collector - medium efficiency
009	Centrifugal collector - low efficiency
010	Electrostatic precipitator - high efficiency
011	Electrostatic precipitator - medium efficiency
012	Electrostatic precipitator - low efficiency
013	Gas scrubber (general, not classified)
014	Mist eliminator - high velocity
015	Mist eliminator - low velocity
016	Fabric filter - high temperature
017	Fabric filter - medium temperature
018	Fabric filter - low temperature
019	Catalytic afterburner
020	Catalytic afterburner with heat exchanger
021	Direct flame afterburner
022	Direct flame afterburner with heat exchanger
023	Flaring
039	Catalytic oxidation - flue gas desulfurization
040	Alkalized alumina
041	Dry limestone injection
042	Wet limestone injection
043	Sulfuric acid plant - contact process
045	Sulfur facility
046	Process change
047	Vapor recovery system (including condensers, hooding, and other enclosures)
048	Activated carbon adsorption
049	Liquid filtration system
050	Packed-gas absorption column
051	Tray-type gas absorption column
052	Spray tower (gaseous control only)

<u>Equipment id</u>	<u>Control Device/Method</u>
---------------------	------------------------------

## Appendix E

053            Venturi scrubber (gaseous control only)

For the particulate control devices (wet scrubbers, gravity collectors, centrifugal collectors, and electrostatic precipitators), the efficiency ranges correspond to the following percentages:

High:	95 - 99+
Medium:	80 - 95
Low:	<80

\*There are more Control Device Codes than those appearing on this list, but the EIS COBOL programs may not recognize those other codes. Use only the codes on this list. Use of codes not on this list may result in a PEDMSTR Error 61 or 63.

## APPENDIX F

### STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES

#### -partial list-

This Appendix contains a partial list of SIC codes. The majority of SICs that are applicable to industries in Louisiana are represented on this list. However, to obtain a complete list of SIC codes, see the *Standard Industrial Classifications Manual* (1987). This book may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161 (Order No. PB 87-100012).

<b>Classification</b>	<b>SIC CODE</b>
Crude petroleum and natural gas	1311
Natural gas liquids	1321
Raw cane sugar	2061
Cane sugar refining	2062
Softwood veneer and plywood	2436
Paper mills exc building paper	2621
Alkalies and chlorine	2812
Inorganic pigments	2816
Industrial inorganic chemicals	2819
Plastics materials and resins	2821
Synthetic rubber	2822
Paints, varnishes, lacquers, enamels, and allied products	2851
Gum and wood chemicals	2861
Cyclic crudes and intermediate	2865
Industrial organic chemicals, nec	2869
Nitrogenous fertilizers	2873
Agricultural chemicals	2879
Carbon black	2895
Chemical preparations, nec	2899
Petroleum refining	2911
Asphalt batching	2951
Cement manufacturing	3241
Minerals and earths, treated	3295
Iron and steel mills	3312
Gray iron foundries	3321
Secondary smelting and refining of non-ferrous metals	3341
Telephone/telegraph apparatus	3661
Ship building and repairing	3731
<b>Classification</b>	<b>SIC CODE</b>
Special warehousing & storage	4226

## Appendix F

Marine cargo handling (1977)	4463
Electric services	4911
Natural gas transmission	4922
Gas production distribution	4925
Refuse systems	4953
Petroleum bulk stations and terminals	5171

## APPENDIX G

### UNIVERSAL TRANSVERSE MERCATOR (UTM)

The Universal Transverse Mercator (UTM) rectangular coordinate system is used by the AQD and EPA instead of the latitude/ longitude coordinate system.

There are ten UTM Zones in the United States, and Louisiana lies in zones 15 and 16 (see map). The boundaries of zone 15 are 98°-90° west longitude, and the boundaries of zone 16 are 90°-84° west longitude. Within each UTM Zone, there exists a rectangular grid based on and aligned with a “central meridian”. The central meridian for zone 15 is 93° west longitude. The UTM Vertical coordinates start with zero at the Equator and increase northwards. The UTM Horizontal coordinates have their lowest value at the western edge of each zone and increase eastward.

The AQD and EPA use UTM coordinates in atmospheric modeling, and for this reason it is important that UTM coordinates be correct.

In an ongoing Quality Control project, the AQD may edit some UTM coordinates that are felt to be wrong. In most cases, the facility in question is consulted before any changes to Submittal Files are made. If you have a question about changes made to your Submittal File, call the Emissions Inventory Coordinator at (504)765-0190.

<b><u>UTM coordinates of the AQD Modeling Domain:</u></b>		
	<b>Northing</b>	<b>Easting</b>
<b>Max.</b>	740000	3432000
<b>Min.</b>	608000	3300000

**[map appears in printed manual only]**

**Do not use this map to find UTM coordinates—use a USGS map.**

## APPENDIX H

### ACTION CODES AND TRANSACTION FIELD TABLES

The proper use of Action Codes is a critical factor affecting the quality of the EIS data base. Persons who edit EIS Submittal Files should have a clear understanding of how to use Action Codes.

The EIS COBOL programs interpret an **A** Action Code as an attempt to add data to the Master File that did not already exist there. The **D** Action Code is interpreted as an attempt to delete existing data from the Master File. The **C** Action Code is interpreted as an attempt to change existing data in the Master File. You cannot add data that already exists in the Master File, and you cannot delete or change data *unless* it exists in the Master File.

If an attempt is made to add data that already exists in the Master File data base, or delete or change data that does not exist in the Master File, a PFMMSTR error will result, and that Submittal File will not merge.

The AQD examines the error reports of all Submittal Files that fail to merge. Those files that can be fixed by the AQD are edited and merged, and those files that cannot be fixed by the AQD are mailed back with a letter, requesting that the Submittal File be corrected and a printout, describing the errors found in the file.

#### Add Transactions

##### **Adding a Facility Record:**

To add a new facility to the Master File, every Card in a Submittal File must have the **A** Action Code. The minimum Cards required to add a new facility to the Master File are: Cards 01, 02, 03, 04, 11, 12, 13, 14, 21, 22, and 23.

##### **Adding a Point Record:**

To add a new NEDS Point to an existing facility in the Master File, all of the Cards being added must have an **A** Action Code, and the minimum Cards needed are: Cards 11, 12, 13, 14, 21, 22, and 23.

##### **Adding an SCC Record:**

To add a new SCC Record to an existing NEDS Point in the Master File, all of the Cards being added must have an **A** Action Code, and the minimum Cards needed are: Cards 21, 22, and 23.

## Delete Transactions

### Deleting a Point Record:

A Card 11 with an Action Code **D** will delete all Cards in the Master File (within that facility) with that NEDS Point. In other words, a "Card 11D" will remove not only the Card 11, it will remove the Cards 12, 13, 14, 21, 22, 23, 24, 25, and 30 that have the same NEDS id as the Card 11D.

For example, If a Submittal File contains a Card 11D, 12D and 13D for NEDS Point **AA**, the EIS COBOL programs would act on the 11D, deleting all of the Cards in the Master File with NEDS id **AA**. Then the EIS COBOL program would attempt to act on the other Cards, but the data for those Cards would already have been deleted, an error would result, and the file would not merge. In fact, a Card 12D or Card 14D is never valid. The only way to delete Cards 12 or 14 is to delete the entire NEDS Point with a Card 11D.

### Example:

*Incorrect example of how to delete a NEDS Point:*

<b>190840106777795365AA</b>	<b>11D</b>
<b>190840106777795365AA</b>	<b>12D</b>
<b>190840106777795365AA</b>	<b>13D</b>
<b>190840106777795365AA</b>	<b>14D</b>
<b>190840106777795365AA3100020300</b>	<b>21D</b>
<b>190840106777795365AA3100020300</b>	<b>22D</b>
<b>190840106777795365AA3100020300</b>	<b>23D</b>

The Card 11D would delete the NEDS Point from the Master File, then the 12D, 13D, 14D, 21D, 22D, and 23D would cause errors because they had all already been deleted by the 11D. (also 12D and 14D are invalid)

*Correct example of how to delete an entire NEDS Point:*

<b>190840106777795365AA</b>	<b>11D</b>
-----------------------------	------------

The Card 11D will delete all of the Cards with a NEDS id AA (in facility 0840-7777) from the Master File.

### Deleting an SCC Record:

A Card 21 with an Action Code **D** (for Delete) will delete all of the SCC Segment Cards in the Master File with the same NEDS id, SCC Number, and SCC Sequence Number. Note that you may use a Card 21D only if there is more than one SCC Record in the Master File for that NEDS Point. Every NEDS Point must have at least one SCC Record in the Master File. Also, Cards 22D, 24D and 25D are never valid. The only way to delete Cards 22, 24 or 25 is to delete the entire SCC Record with a Card 21D.



**Example:**

*Incorrect example of how to delete an SCC Record:*

<b>190840106777795365AA3100020300</b>	<b>21D</b>
<b>190840106777795365AA3100020300</b>	<b>22D</b>
<b>190840106777795365AA3100020300</b>	<b>23D</b>
<b>190840106777795365AA3100020300</b>	<b>24D</b>
<b>190840106777795365AA3100020300</b>	<b>25D</b>

The Card 21D would delete the SCC Record from the Master File, then the 22D, 23D, 24D and 25D would cause errors because they had all already been deleted by the 21D. (also 22D, 24D and 25D are invalid)

*Correct example of how to delete an entire SCC Record:*

<b>190840106777795365AA3100020300</b>	<b>21D</b>
---------------------------------------	------------

The Card 21D will delete all of the SCC Record Cards with a NEDS id AA (in facility 0840-7777) from the Master File.

**Deleting a Comment Record:**

There are two ways to delete a Comment Record:

- 1) To delete a specific Card 30 Comment line, enter the Key Block, P&R Line Number (do not enter L or R), and **30D**. Both L (left) and R (right) comments will be deleted;
- 2) To delete the entire Comment Record (that is, all Card 30s associated with a NEDS Point), enter the Key Block data, **000** in the P&R Line Number field, and **30D** at the end of the Card.

**Change Transactions**

In order to change data on a Card in the Master File, that Card must already exist in the Master File. Always look at the data file mailed to the facility by the AQD each year, this file contains what is actually in the current Master File for that facility.

**Example:**

If you wish to change the SAROAD Pollutant Code from 43101 ("Total hydrocarbons" which is no longer used) to 43104 ("Total VOCs"), you cannot simply edit the old SAROAD Pollutant Code and submit the Card as a 13C. The SAROAD Pollutant Code is part of the Key Block on a Card 13. Therefore, to change a SAROAD Pollutant Code, you must first delete the Card 13 with the old pollutant, then add a Card 13 with the new pollutant.

<b>1) 1908401067777953650243101000033400000000000000012</b>	<b>00000155</b>	<b>13</b>
<b>2) 1908401067777953650243104000033400000000000000012</b>	<b>00000155</b>	<b>13C</b>
<b>3) 1908401067777953650243101</b>		<b>13D</b>
<b>1908401067777953650243104000033400000000000000012</b>	<b>00000155</b>	<b>13A</b>

- 1) Data in the Master File with old Pollutant Code, 43101.
- 2) Wrong way to change the Pollutant Code: Edit the Pollutant Code and submit it as a Card 13C.
- 3) Correct way to change the Pollutant Code: Delete the Card 13 with 43101 first then add a Card 13 with the new code.

**No Transaction**

Instructions for not changing data in the Master File:

Any Card in a Submittal File with a **[blank]** Action Code field is ignored by the EIS COBOL programs.

## EIS TRANSACTION TABLES

The "Transaction Tables" below are included as a reference; they express the rules that govern which fields must be present and which must be blank when adding/changing/deleting Cards. The valid transactions are: **Add**, **Change**, and **Delete**. The tables below explain which fields are *Required* (R) and which fields *must be blank* (X) when adding, changing, or deleting Cards.

For example, to delete a Card 13, the following fields are *Required* (R): State, Parish, AQCR, Facility id, Date, NEDS Point, Pollutant Code, Card Number, and Action Code; all other fields on the Card 13D *must be blank* (X).

### Key

R = Required  
 X = Must be **[blank]**  
 [blank] = Optional  
 A/N = Alphanumeric/Numeric field

### Notes

R<sup>1</sup> = See "Stack Data" on page 21.  
 R<sup>2</sup> = All three fields must be entered or blank  
 R<sup>3</sup> = See "Deleting a Comment Record" in Appendix H

### CARD 01

FIELD NAME	COLUMN	A/N	Add	Change
STATE	1-2	N	R	R
PARISH	3-6	N	R	R
AQCR	7-9	N	R	R
FACILITY id	10-13	A	R	R
DATE	14-18	N	R	R
(not used)	19-23		X	X
USER PLANT id	24-35	A		
CITY CODE	36-39	N		
UTM ZONE	40-41	N	R	
OWNERSHIP CODE	42	A	R	
CONTACT PERSON	43-57	A	R	
TELEPHONE	58-67	N	R	
PRINC. PRODUCT	68-77	A		
CARD NUMBER	78-79	N	R	R
ACTION CODE	80	A	R	R

## Appendix H

### CARD 02

FIELD NAME	COLUMN	A/N	Add	Change
STATE	1-2	N	R	R
PARISH	3-6	N	R	R
AQCR	7-9	N	R	R
FACILITY id	10-13	A	R	R
DATE	14-18	N	R	R
PHYSICAL ADDRESS	19-66	A	R	
NO. EMPLOYEES	67-70	N		
PROPERTY AREA	71-76	N		
(not used)	77		X	X
CARD NUMBER	78-79	N	R	R
ACTION CODE	80	A	R	R

### CARD 03

FIELD NAME	COLUMN	A/N	Add	Change
STATE	1-2	N	R	R
PARISH	3-6	N	R	R
AQCR	7-9	N	R	R
FACILITY id	10-13	A	R	R
DATE	14-18	N	R	R
MAILING ADDRESS	19-66	A	R	R
(not used)	67-77		X	X
CARD NUMBER	78-79	N	R	R
ACTION CODE	80	A	R	R

### CARD 04

FIELD NAME	COLUMN	A/N	Add	Change
STATE	1-2	N	R	R
PARISH	3-6	N	R	R
AQCR	7-9	N	R	R
FACILITY ID	10-13	A	R	R
DATE	14-18	N	R	R
AIR PERMIT NUMBER	19-31	A	R	
(not used)	32		X	X
COMMENT	33-70	A		
(not used)	71-77		X	X
CARD NUMBER	78-79	N	R	R
ACTION CODE	80	A	R	R

## CARD 11

FIELD NAME	COLUMN	A/N	Add	Change	Delete
STATE	1-2	N	R	R	R
PARISH	3-6	N	R	R	R
AQCR	7-9	N	R	R	R
FACILITY id	10-13	A	R	R	R
DATE	14-18	N	R	R	R
NEDS POINT id	19-20	A	R	R	R
USER POINT id	21-23	A			X
SIC	24-27	N	R		X
(not used)	28-29		X	X	X
UTM HORIZONTAL	30-33	N	R		X
UTM VERTICAL	34-38	N	R		X
(not used)	39-51		X	X	X
ANNUAL THROUGH P.	52-59	N			X
OPERATING RATE	60-64	N			X
BOILER CAPACITY	65-69	N			X
SPACE HEAT	70-72	N			X
(not used)	73-77		X	X	X
CARD NUMBER	78-79	N	R	R	R
ACTION CODE	80	A	R	R	R

## CARD 12

FIELD NAME	COLUMN	A/N	Add	Change
STATE	1-2	N	R	R
PARISH	3-6	N	R	R
AQCR	7-9	N	R	R
FACILITY ID	10-13	A	R	R
DATE	14-18	N	R	R
NEDS POINT ID	19-20	A	R	R
STACK HEIGHT	21-24	N		
STACK DIAMETER	25-27	N	R	
STACK TEMP	28-31	N	R	
FLOW RATE	32-38	N	R	
VELOCITY	39-43	N	R	
PLUME HEIGHT	44-47	N	R	
POINTS WITH COMM.	48-51	A		
(not used)	52-63		X	X
VOC CONTROL NO.	64-67	N		
(not used)	68-77		X	X
CARD NUMBER	78-79	N	R	R
ACTION CODE	80	A	R	R

## Appendix H

### CARD 13

FIELD NAME	COLUMN	A/N	Add	Change	Delete
STATE	1-2	N	R	R	R
PARISH	3-6	N	R	R	R
AQCR	7-9	N	R	R	R
FACILITY ID	10-13	A	R	R	R
DATE	14-18	N	R	R	R
NEDS POINT ID	19-20	A	R	R	R
POLLUTANT CODE	21-25	N	R	R	R
PERMITTED EMM.	26-32	N	R		X
P. CNTRL. EQUIP.	33-35	N			X
S. CNTRL. EQUIP.	36-38	N			X
EST. CONTRL. EFF.	39-41	N			X
ESTIMATED EMM.	42-48	N	R		X
MEASURED EMM.	49-55	N			X
ALLOWABLE EMM.	56-62	N	R		X
(not used)	63		X	X	X
ESTIMATION CODE	64	N			X
BASELINE CHANGES	65	N			X
OZONE SEASON DAY	66-73	N			X
(not used)	74-77		X	X	X
CARD NUMBER	78-79	N	R	R	R
ACTION CODE	80	A	R	R	R

### CARD 14

FIELD NAME	COLUMN	A/N	Add	Change
STATE	1-2	N	R	R
PARISH	3-6	N	R	R
AQCR	7-9	N	R	R
FACILITY id	10-13	A	R	R
DATE	14-18	N	R	R
NEDS POINT id	19-20	A	R	R
DESCRIPTIVE CODE	21	A	R	
(not used)	22		X	X
PERMIT PNT. id	23-27	A	R	
(not used)	28		X	X
COMMENT	29-72	A		
(not used)	73-77		X	X
CARD NUMBER	78-79	N	R	R
ACTION CODE	80	A	R	R

**CARD 21**

FIELD NAME	COLUMN	A/N	Add	Change	Delete
STATE	1-2	N	R	R	R
PARISH	3-6	N	R	R	R
AQCR	7-9	N	R	R	R
FACILITY id	10-13	A	R	R	R
DATE	14-18	N	R	R	R
NEDS POINT id	19-20	A	R	R	R
SCC	21-28	N	R	R	R
SCC SEQ. NO.	29-30	N	R	R	R
(not used)	31-36		X	X	X
SOLID WASTE OP.	37-43	N			X
MAX. DESIGN CAP.	44-50	N			X
SULFUR CONTENT	51-53	N			X
ASH CONTENT	54-56	N			X
HEAT CONTENT	57-61	N			X
ASH-SULFUR ORIGIN	62	A	R		X
ASH-SULFUR SRC.	63	A			X
(not used)	64-77		X	X	X
CARD NUMBER	78-79	N	R	R	R
ACTION CODE	80	A	R	R	R

**CARD 22**

FIELD NAME	COLUMN	A/N	Add	Change
STATE	1-2	N	R	R
PARISH	3-6	N	R	R
AQCR	7-9	N	R	R
FACILITY id	10-13	A	R	R
DATE	14-18	N	R	R
NEDS POINT id	19-20	A	R	R
SCC	21-28	N	R	R
SCC SEQ. NO.	29-30	N	R	R
CONFIDENTIALITY	31	N		
SOURCE CODE	32	A		
SOURCE DESCRIPT.	33-57	A		
(not used)	58-77		X	X
CARD NUMBER	78-79	N	R	R
ACTION CODE	80	A	R	R

## Appendix H

### CARD 23

FIELD NAME	COLUMN	A/N	Add	Change	Delete
STATE	1-2	N	R	R	R
PARISH	3-6	N	R	R	R
AQCR	7-9	N	R	R	R
FACILITY ID	10-13	A	R	R	R
DATE	14-18	N	R	R	R
NEDS POINT ID	19-20	A	R	R	R
SCC	21-28	N	R	R	R
SCC SEQ. NO.	29-30	N	R	R	R
EMF ORIGIN	31	A	R	R	X
EMF SOURCE	32	A			X
POLLUTANT CODE	33-37	N	R	R	R
EMISSION FACTOR	38-46	N			X
ASH-SULFUR CODE	47	A			X
(not used)	48		X	X	X
POLLUTANT CODE	49-53	N	X	X	R
EMISSION FACTOR	54-62	N			X
ASH-SULFUR CODE	63	A			X
(not used)	64-77		X	X	X
CARD NUMBER	78-79	N	R	R	R
ACTION CODE	80	A	R	R	R

### CARD 24

FIELD NAME	COLUMN	A/N	Add	Change
STATE	1-2	N	R	R
PARISH	3-6	N	R	R
AQCR	7-9	N	R	R
FACILITY id	10-13	A	R	R
DATE	14-18	N	R	R
NEDS POINT id	19-20	A	R	R
SCC	21-28	N	R	R
SCC SEQ. NO.	29-30	N	R	R
SCC COMMENT	31-56	A		
(not used)	57-77		X	X
CARD NUMBER	78-79	N	R	R
ACTION CODE	80	A	R	R



**CARD 25**

FIELD NAME	COLUMN	A/N	Add	Change
STATE	1-2	N	R	R
PARISH	3-6	N	R	R
AQCR	7-9	N	R	R
FACILITY id	10-13	A	R	R
DATE	14-18	N	R	R
NEDS POINT id	19-20	A	R	R
SCC	21-28	N	R	R
SCC SEQ. NO.	29-30	N	R	R
SCC COMMENT	31-56	A		
(not used)	57-77		X	X
CARD NUMBER	78-79	N	R	R
ACTION CODE	80	A	R	R

**CARD 30**

FIELD NAME	COLUMN	A/N	Add	Change	Delete
STATE	1-2	N	R	R	R
PARISH	3-6	N	R	R	R
AQCR	7-9	N	R	R	R
FACILITY ID	10-13	A	R	R	R
DATE	14-18	N	R	R	R
NEDS POINT ID	19-20	A	R	R	R
P&R SEQ. NO.	21-22	N	R	R	R <sup>3</sup>
P&R LINE NO.	23-25	N	R	R	R <sup>3</sup>
L/R	26	A	R	X	X
HALF COMMENT	27-77	A			X
CARD NUMBER	78-79	N	R	R	R
ACTION CODE	80	A	R	R	R



## APPENDIX I

### EMISSIONS INVENTORY BULLETIN BOARD SYSTEM (EIBB)

#### General

The EIBB's purpose is to provide industry and consultants a fast and efficient way (utilizing a computer, modem, and terminal software) to upload, or download, files and to communicate with the Emissions Inventory Unit. The EIBB is a set of computers connected to a common point on the AQD's network from which a single multi-line version of Wildcat (Bulletin Board Software) is being run.

Barring technical problems, the EIBB will be on-line twenty-four hours a day seven days a week. There are four SYSOPS available to assist users via E-mail. Any general problems or request can be addressed to any one of the four SYSOPS.

#### Registering

Registering to use the EIBB can be done in two ways - dialing into the EIBB itself using terminal software and a modem or by calling a SYSOP on the phone and requesting a new account. New users to the EIBB will have restrictive upload and download privileges unless a security level of "E10" is granted.

##### Dial-In Request

Users who dial into the EIBB to register will be given a "NEWUSER" security level by the **Wildcat** system and may at any time request an "E10" security level by sending a comment to a SYSOP.

##### Phone-In Request

Users who chose to call a SYSOP on the phone to establish a new account may request a security level of "E10"; otherwise, the "NEWUSER" level will be employed.

Individuals who have used the EIBB in the past and have forgotten their password must create a new account with a new password; you may request that a SYSOP delete your old account from the system.

#### Files on the EIBB

New users to the EIBB will be able to download informative EIS files and all of the popular shareware packages used by the EIS group. Once a user is given a security level of "E10", he or she will be able to upload EIS files, send mail to other users, and access all library files.

## Appendix I

### Technical Help

Users who have question about the EIBB or problems logging on, may call any of the EIBB SYSOPS at (504) 7765-0190.

### Cost

Use of the EIBB is free of charge; however, the EIBB is in the 504 telephone area code. User outside of this area code are responsible for any long-distance charges that they incur while logged into the EIBB.

### How to Access the EIBB

1) You must have a computer with a modem and terminal software installed.

2) Set the terminal software to:

Data Bits .....	8
Parity .....	N
Stop Bits .....	1
Baud .....	up to 14.4 Kbps
Terminal Emulation .....	ANSI

3) Dial one of the EIBB phone numbers:

**(Node 1) (504) 765-0365**  
**(Node 2) (504) 765-0111.**

## APPENDIX J

## SAMPLE EIS SUBMITTAL FILE

(columns)

1	2	3	4	5	6	7	8
12345678901234567890123456789012345678901234567890123456789012345678901234567890							
192880106777795365	XYZ-9151991	124015PI. M	BOSS	31833399990	IL & GAS	01A	
192880106777795365XYZ	OIL & GAS 5MS	HW6	HOUMA LA	70360	0001200105	02A	
192880106777795365XYZ	CORP. OFFICE	EARLHAM ROAD	REDMOND VA	98052		03A	
1928801067777953652880-07777-01	THE 1995 EIS SUBMITTAL FILE					04A	
192880106777795365010011311	708732311			2525252524750		11A	
192880106777795365010030004050000000500000010000						12A	
1928801067777953650142602			00002220000222		1	13A	
1928801067777953650142101			00001020000102		1	13A	
1928801067777953650142401			000009900000099		1	13A	
1928801067777953650143104			000005000000050		1	13A	
1928801067777953650111101			000000600000006		1	13A	
192880106777795365010 001	500 HP NATURAL GAS-FIRED COMPRESSOR ENGINE					14A	
192880106777795365013100020300	0000007			01050F		21A	
1928801067777953650131000203002C500	HP COMPRESSOR ENGINE					22A	
192880106777795365013100020300F 42602						23A	
192880106777795365013100020300F 42101						23A	
192880106777795365013100020300F 42401						23A	
192880106777795365013100020300F 43104						23A	
192880106777795365013100020300F 11101						23A	
1928801067777953650100001L	COMPRESSOR DOWN FOR 3 WEEKS MAINTENANCE DUE TO VERY					30A	
1928801067777953650100001R	HEAVY RAIN AND WINDS ON 3-30-95.					30A	
1928801067777953650100002L/VJ/CM/JS/JB/JR/HB/LF/KG						30A	
1928801067777953650100002RK1	CORP. BOARD					30A	
192880106777795365020021311	708732311			2525252524711		11A	
192880106777795365020030004050000000516037850000						12A	
1928801067777953650242602			000001500000015		1	13A	
1928801067777953650242101			000000200000002		1	13A	
1928801067777953650242401			00001230000123		1	13A	
1928801067777953650243104			000008300000083		1	13A	
1928801067777953650245103			000008300000083		1	13A	
192880106777795365020 002	223 HP NATURAL GAS-FIRED RECIPROCATING ENG.					14A	
192880106777795365022020020200	0000007			01050F		21A	
1928801067777953650220200202002C223	HP ENGINE					22A	
192880106777795365022020020200F 42602						23A	
192880106777795365022020020200F 42101						23A	
192880106777795365022020020200F 42401						23A	
192880106777795365022020020200F 43104						23A	
192880106777795365022020020200F 45103						23A	
192880106777795365022020020200IF I HAD A COMMENT ABOUT						24A	
192880106777795365022020020200THIS SCC, IT WOULD BE HERE						25A	
192880106777795365030031311	708732311			2525252524752		11A	
19288010677779536503000000000077000000000000000013					2103	12A	
1928801067777953650343104			0000011		5	13A	
1928801067777953650343209			0000001		5	13A	
1928801067777953650343231			0000005		5	13A	
1928801067777953650343204			0000002		5	13A	
1928801067777953650345201			0000003		5	13A	
19288010677779536503T 003	5280 GALLON TANK					14A	

## Appendix J

192880106777795365034040030200	0000001	F	21A
1928801067777953650340400302002PTANK WORKING LOSS			22A
192880106777795365034040030200F 43104			23A
192880106777795365034040030200F 43209			23A
192880106777795365034040030200F 43231			23A
192880106777795365034040030200F 43204			23A
192880106777795365034040030200F 45201			23A
192880106777795365034040030100	0000000	F	21A
1928801067777953650340400301002PTANK BREATHING LOSS			22A
192880106777795365034040030100F 43104			23A
192880106777795365034040030100F 43209			23A
192880106777795365034040030100F 43231			23A
192880106777795365034040030100F 43204			23A
192880106777795365034040030100F 45201			23A
192880106777795365040041311 708732221	2525252524752		11A
19288010677779536504003200200800000000000000000000			12A
1928801067777953650441041	0000001	5	13A
19288010677779536504W 004 SUMP			14A
192880106777795365043100010400	0000001	F	21A
1928801067777953650431000104002PLCRUDE OIL LOSS			22A
192880106777795365043100010400F 41041			23A
19288010677779536505 1311 708732311	2525252524752		11A
19288010677779536505000000000770000000000000000000		2121	12A
1928801067777953650543104	0000005	5	13A
1928801067777953650543201	0000001	5	13A
1928801067777953650545103	0000001	5	13A
1928801067777953650545203	0000001	5	13A
1928801067777953650545202	0000001	5	13A
1928801067777953650545102	00000010000000	5	13A
19288010677779536505E 005 FUGITIVE EMISSIONS			14A
192880106777793365053108880100		F	21A
1928801067777933650531088801002PFUGITIVE EMISSIONS			22A
192880106777795365053108880100F 43104			23A
192880106777795365053108880100F 43201			23A
192880106777795365053108880100F 45103			23A
192880106777795365053108880100F 45203			23A
192880106777795365053108880100F 45202			23A
192880106777795365053108880100F 45102			23A
1928801067777933650500001LAST YEAR WE USED: EMISSION FACTORS PER API			30A
1928801067777933650500001RPUBLICATION NUMBER 4589.			30A
1928801067777933650500002L"FUGITIVE HYDROCARBON EMISSIONS FROM OIL AND GAS			30A
1928801067777933650500002R PRODUCTION OPERATIONS, "DECEMBER 1993.			30A
1928801067777933650500003LCOMPONENT EMISSION FACTORS:			30A
1928801067777933650500003R			30A
1928801067777933650500004LCONNECTIONS = 0.0006 LB/DAY EACH			30A
1928801067777933650500004R			30A
1928801067777933650500005LVALVES = 0.0217 LB/DAY EACH			30A
1928801067777933650500005R			30A
1928801067777933650500006LO- E LINES = 0.0099 LB/DAY EACH			30A
1928801067777933650500006R			30A
1928801067777933650500007LOTHER = 0.1036 LB/DAY EACH			30A
1928801067777933650500007R			30A

## SAMPLE CERTIFICATION STATEMENT

### CERTIFICATION STATEMENT FOR 19XX CRITERIA POLLUTANT EMISSIONS REPORT

I CERTIFY, UNDER THE PROVISIONS IN THE LOUISIANA AND UNITED STATES LAWS WHICH PROVIDE CRIMINAL PENALTIES FOR FALSE STATEMENTS, THAT THE EMISSIONS DATA AND OTHER INFORMATION CONTAINED IN THIS DOCUMENT IS ACCURATE AND TRUE TO THE BEST OF MY KNOWLEDGE.

#### CHECK ONLY ONE

- 1) ☐ Certifying Emissions Inventory data to **update** the 19XX Emissions Inventory data currently on file with LDEQ/Air Quality Division for the reporting year 19XX.
- 2) ☐ Certifying **initial** submittal of Emissions Inventory data to LDEQ/Air Quality Division for calendar year 19XX.
- 3) ☐ Certifying that Emissions Inventory data for the reporting year 19XX **have not changed** from the data currently on file with LDEQ/Air Quality Division.
- 4) ☐ Certifying **corrections** to Emissions Inventory data already submitted to LDEQ/Air Quality Division for reporting year 19XX.

Reporting for entire calendar year ☐

Reporting for Partial calendar year from ☐ thru ☐

If reporting for partial year indicate:

Bought From ☐ or Sold To ☐

Below are the summarized pollutant totals being reported according to the category marked above. These totals **should** correspond with the new or revised EIS submittal (per numbers 1 or 2 above) or reflect the totals as maintained in 19XX submittal if no changes occurred (per number 3 above). All averages **must** be completed.

#### 19XX ACTUAL EMISSIONS OF CRITERIA AIR POLLUTANTS

##### ANNUAL AVERAGE

(units are tons per year)

TOXIC VOC <input type="checkbox"/>	CO <input type="checkbox"/>
NON TOXIC VOC <input type="checkbox"/>	SO <sub>2</sub> <input type="checkbox"/>
TOTAL VOC <input type="checkbox"/>	PM <sub>10</sub> <input type="checkbox"/> (indicate if reported as TSP)
NOX <input type="checkbox"/>	

Signature of Company Agent

Date

Type or Print Name and Title

Name of Company

Telephone Number of Company Agent

Facility Name

Parish and EIS Identification Number

## APPENDIX K

There are three EIS COBOL programs that generate error reports when a Submittal File fails to merge: PEDMSTR, PFMMSTR, and the PVP. Below is an explanation of the error messages generated by each.

### PEDMSTR EIS PROGRAM

#### (EDIT MAINTENANCE PROGRAM)

PEDMSTR checks EIS Submittal Files for "edit errors," such as invalid codes, alphabetic characters where numeric data are required, etc. When the PEDMSTR program finds an edit error in a Submittal File, it creates a PEDMSTR Error Report. The AQD examines all error reports. Those files that can be fixed by the AQD are edited and merged, and those files that cannot are mailed back with a letter, requesting that the Submittal File be corrected and a printout, describing the errors found in the file.

Below is a sample PEDMSTR Error Report. The PEDMSTR report is difficult to read because it was designed to be printed on a wide lineprinter. If you do not understand a PEDMSTR error, refer to the PEDMSTR Appendix entries.

**It is strongly suggested that you correct PEDMSTR errors and resubmit your EIS file before you attempt to correct any PFMMSTR errors.**

**SAMPLE PEDMSTR ERROR REPORT**

```

EIS/PS MASTER FILE TRANSACTION EDIT PROGRAM - DIAGNOSTIC
REPORT      Report
PAGE        1
PROGRAM NAME: PEDMSTR (EP0080)
REVISION LEVEL: 3-02
LAST UPDATE #: P-5
DATE INCORPORATED: APRIL 30, 1986
OPTIONS IN EFFECT: FLAGW      LIST
CONTROL YEAR: 95
1900401067777953650919I4925  547333430      25252525 00
0      0      0      11C
BE
BE
*** PEDMSTR 058 ERROR - COLUMN 60 - NON NUMERIC DAY
FOR OPERATING RATE, CARD REJECTED
*** PEDMSTR 111 ERROR - COLUMN 63 - NON NUMERIC YEAR
FOR OPERATING RATE, CARD REJECTED
  
```

*Header*

*Error*

*EIS Card*

*Message*



```

1900401067777953651019J4925  547333430      25252525 00
0    0    0      11C

```

BE

BE

\*\*\* PEDMSTR 058 ERROR - COLUMN 60 - NON NUMERIC DAY  
FOR OPERATING RATE, CARD REJECTED

\*\*\* PEDMSTR 111 ERROR - COLUMN 63 - NON NUMERIC YEAR  
FOR OPERATING RATE, CARD REJECTED

```

1900401067777953651423 4925  547333430      25252525247
4    0    0      11C

```

BE

\*\*\* PEDMSTR 111 ERROR - COLUMN 63 - NON NUMERIC YEAR  
FOR OPERATING RATE, CARD REJECTED

NUMBER OF TRANSACTIONS READ:	94
NUMBER OF INTERNAL TRANSACTIONS WRITTEN:	91
NUMBER OF TRANSACTIONS REJECTED:	3
NUMBER OF ABORT MESSAGES:	0
NUMBER OF ERROR MESSAGES:	5
NUMBER OF CONDITIONAL MESSAGES:	0
NUMBER OF WARNING MESSAGES:	0

### Sample PEDMSTR Appendix Entry

<i>EIS COBOL Program</i>	<i>Error No.</i>	<i>Error Type</i>	<i>Location</i>	<i>Error Message</i>
<b>PEDMSTR</b>	<b>005</b>	<b>ERROR</b>	<b>- COLUMN 1</b>	<b>- INVALID STATE CODE, CARD REJECTED</b>
<b>Meaning:</b> The State Code for Louisiana is <b>19</b> .				
<b>Action:</b> Enter <b>19</b> in the State Code column.				

### APPENDIX TERMS:

**EIS Program:** PEDMSTR or PFMMSTR

**Error No.:** Sequential numbers 000-111.

**Error Type:** Types of errors which occur:

- 1) **ERROR** - Must be corrected before the EIS file can be merged.
- 2) **CONDITIONAL** - Can be ignored.
- 3) **WARNING** - Can be ignored.
- 4) **ABORT** - Can be ignored.

## Appendix K

**Location:** The column number on the Card where the error may be found.

**Error Message:** EIS Error Message

**Meaning** Comment that describes the meaning of the error message.

**PEDMSTR ERROR MESSAGES:****PEDMSTR 001-PEDMSTR 004**

Action: Ignore.

**PEDMSTR 005 ERROR - COLUMN 1 - INVALID STATE CODE, CARD REJECTED**

Meaning: The State Code for Louisiana is **19**.

Action: Always enter **19** in the State Code field.

**PEDMSTR 006 ERROR - COLUMN 03 - NON-NUMERIC COUNTY CODE**

Meaning: The Parish Code field must be numeric.

Action: Use the valid numeric Parish Code for the parish in which the facility is located. See Appendix A.

**PEDMSTR 007 ERROR - COLUMN 07 - INVALID AQCR**

Meaning: The AQCR is invalid.

Action: Use the valid AQCR Code for the region in which the facility is located. Valid AQCR Codes are: **019**, **022**, and **106**. See Appendix A.

**PEDMSTR 008 ERROR - COLUMN 10 - INVALID PLANT-ID**

Meaning: The Facility id must contain only numbers.

Action: Use the numeric EIS Facility id assigned to the facility by the AQD. See "EIS Facility id" page 7.

**PEDMSTR 009 ERROR - COLUMN 19 - INVALID POINT-ID**

Meaning: The NEDS Point id must contain only numbers and/or letters.

Action: See "NEDS Point id" on page 17 for instructions.

**PEDMSTR 010 ERROR - COLUMN 21 - NON-NUMERIC SCC NUMBER**

Meaning: The SCC Number field must be numeric. It may not be blank.

Action: Use a valid SCC number. See "SCC" on page 37.

**PEDMSTR 011 ERROR - COLUMN 29 - NON-NUMERIC SCC SEQUENCE NUMBER**

Meaning: The SCC Sequence Number field must be numeric. It may not be blank.

Action: See "SCC Sequence Number" on page 37 for instructions.

**PEDMSTR 012 ERROR - COLUMN 21 - NO-NUMERIC PNR SEQUENCE NUMBER**

Meaning: The P&R Sequence Number field must be numeric.

Action: See "P&R Sequence Number" on page 51 for instructions.

**PEDMSTR 013 ERROR - COLUMN 23 - NON-NUMERIC PNR LINE NUMBER**

Meaning: The P&R Line Number field must be numeric.

Action: See "P&R Line Number" on page 51 for instructions.

**PEDMSTR 014 ERROR - COLUMN 78 - INVALID TRANSACTION CARD NUMBER**

## Appendix K

**Meaning:** The Card Number is invalid.

**Action:** Use valid Card Numbers: **01, 02, 03, 04, 11, 12, 13, 14, 21, 22, 23, 24, 25, 30.**

### **PEDMSTR 015 ERROR - COLUMN 80 - INVALID ACTION TYPE**

**Meaning:** The Action Code is invalid.

**Action:** Valid Action Codes: **A**(Add), **C**(Change), and **D**(Delete). See Appendix H.

### **PEDMSTR 016 WARNING - COLUMN 14 - INVALID DATE SPECIFIED**

**Meaning:** The Date is invalid.

**Action:** Field must be numeric. See "Date of Record" on page 8.

### **PEDMSTR 017 CONDITIONAL - COLUMN 14 - YEAR SPECIFIED IS GREATER THAN OPTION YR**

**Meaning:** The year must be the same year for which the data are submitted.

**Action:** See "Date of Record" on page 8 for instructions.

### **PEDMSTR 018 CONDITIONAL - COLUMN 36 - INVALID CITY SPECIFIED**

**Meaning:** The City Code field must be numeric.

**Action:** See "City Code" on page 8 for instructions.

### **PEDMSTR 019 ERROR - COLUMN 40 - NON-NUMERIC UTM ZONE NUMBER**

**Meaning:** The UTM Zone field must be numeric.

**Action:** There are two UTM Zones in Louisiana: **15** and **16**. See Appendix G.

### **PEDMSTR 020 ERROR - COLUMN 40 - UTM ZONE NUMBER OUT OF RANGE**

**Meaning:** The UTM Zone is invalid.

**Action:** There are two UTM Zones in Louisiana, **15** and **16**. See Appendix G.

### **PEDMSTR 021 ERROR - COLUMN 40 - UTM ZONE NUMBER BLANK FOR ADD TRANSACTION**

**Meaning:** The UTM zone is required for an **A**(Add) Card.

**Action:** There are two UTM Zones in Louisiana, **15** and **16**. See Appendix G.

### **PEDMSTR 022 CONDITIONAL - COLUMN 42 - INVALID OWNERSHIP CODE**

**Meaning:** The Ownership Code is invalid.

**Action:** The valid codes are **P, S, L, U,** and **F**. See "Ownership Code" on page 8.

### **PEDMSTR 023 ERROR - COLUMN 58 - NON-NUMERIC TELEPHONE NUMBER**

**Meaning:** The Telephone field must be numeric.

**Action:** Enter a numeric phone number. For example, "**5047650190**".

### **PEDMSTR 024 ERROR - COLUMN 19 - NAME/ADDRESS FIELD BLANK FOR ADD TRANSACTION**

**Meaning:** The "Facility Name and Physical Address" field is required for an **A**(Add) Card.

**Action:** See "Facility Name and Physical Address" on page 11 for instructions.

### **PEDMSTR 025 ERROR - COLUMN 67 - NON-NUMERIC NUMBER OF EMPLOYEES**

**Meaning:** The Number of Employees field must be numeric.

**Action:** See "Number of Employees" on page 11 for instructions.

**PEDMSTR 026 CONDITIONAL - COLUMN 71 - NON-NUMERIC PROPERTY AREA**

Meaning: The Property Area field must be numeric.

Action: See "Property Area" on page 12 for instructions.

**PEDMSTR 027 ERROR - COLUMN 24 - SIC CODE BLANK FOR ADD TRANSACTION**

Meaning: The SIC field is required for an A(Add) Card.

Action: Enter the correct SIC for the facility. See "SIC" on page 18.

**PEDMSTR 028 ERROR - COLUMN 24 - NON-NUMERIC SIC CODE**

Meaning: The SIC field must be numeric.

Action: Enter the correct SIC for the facility. See "SIC" on page 18.

**PEDMSTR 029 ERROR - COLUMN 28 - NON-NUMERIC IPP CODE**

Meaning: This field is not used by AQD. Leave this field blank.

**PEDMSTR 030 ERROR - COLUMN 30 - NON-NUMERIC UTM - HORIZONTAL**

Meaning: The UTM Horizontal field must be numeric.

Action: See "UTM Horizontal" on page 18 for instructions.

**PEDMSTR 031 ERROR - COLUMN 30 - UTM - HORIZONTAL OUT OF RANGE**

Meaning: The UTM Horizontal field is invalid.

Action: See "UTM Horizontal" on page 18 for instructions.

**PEDMSTR 032 ERROR - COLUMN 30 - UTM - HORIZONTAL BLANK FOR ADD TRANSACTION**

Meaning: The UTM Horizontal field was left blank for an A(Add) Card.

Action: See "UTM Horizontal" on page 18 for instructions.

**PEDMSTR 033 ERROR - COLUMN 34 - NON-NUMERIC UTM - VERTICAL**

Meaning: The UTM Vertical field must be numeric.

Action: See "UTM Vertical" on page 18 for instructions.

**PEDMSTR 034 ERROR - COLUMN 34 - UTM - VERTICAL OUT OF RANGE**

Meaning: The UTM Vertical field is invalid.

Action: See "UTM Vertical" on page 18 for instructions.

**PEDMSTR 035 ERROR - COLUMN 34 - UTM - VERTICAL BLANK FOR ADD TRANSACTION**

Meaning: The UTM Vertical field was left blank for an A(Add) Card.

Action: See "UTM Horizontal" on page 18 for instructions.

**PEDMSTR 036 ERROR - COLUMN 39 - NON-NUMERIC LATITUDE**

Meaning: This field is not used by AQD. Leave this field blank.

**PEDMSTR 037 ERROR - COLUMN 45 - NON-NUMERIC LONGITUDE**

Meaning: This field is not used by AQD. Leave this field blank.

**PEDMSTR 038 ERROR - COLUMN 52 - NON-NUMERIC ANNUAL THRUPUT PERCENTAGE**

**Meaning:** This Annual Throughput field must be numeric.

**Action:** See "Annual Throughput" on page 18 for instructions.

*Units = weighted percentage*

**PEDMSTR 039 CONDITIONAL - COLUMN 60 - INVALID DAY FOR OPERATING RATE**

**Meaning:** The Operating Rate is invalid. It may not be blank.

**Action:** The hours per day must be **00-24**. See "Operating Rate" on page 19.

**PEDMSTR 040 ERROR - COLUMN 65 - NON-NUMERIC BOILER DESIGN CAPACITY**

**Meaning:** The Boiler Capacity field must be numeric.

**Action:** See "Boiler Capacity" on page 19 for instructions.

*Units = millions of BTU/hour*

**PEDMSTR 041 ERROR - COLUMN 70 - NON-NUMERIC HEATED SPACE PERCENTAGE**

**Meaning:** The Space Heat field must be numeric.

**Action:** See "Space Heat" on page 19 for instructions.

**PEDMSTR 042 ERROR - COLUMN 21 - NON-NUMERIC STACK HEIGHT**

**Meaning:** The Stack Height field must be numeric.

**Action:** See "Stack Height" on page 21 for instructions.

*Units = feet*

**PEDMSTR 043 ERROR - COLUMN 25 - NON-NUMERIC STACK DIAMETER**

**Meaning:** The Stack Diameter field must be numeric.

**Action:** See "Stack Diameter" on page 21 for instructions.

*Units = feet*

**PEDMSTR 044 CONDITIONAL - COLUMN 25 - STACK DIAMETER EXCEEDS 20 PERCENT OF THE STACK HEIGHT**

**Meaning:** The Stack Diameter must be less than 20% of the stack height.

**Action:** See "Stack Diameter" on page 21 for instructions.

*Units = feet*

**PEDMSTR 045 ERROR - COLUMN 28 - NON-NUMERIC STACK TEMPERATURE**

**Meaning:** This Stack Temperature field must be numeric.

**Action:** See "Stack Temperature" on page 22 for instructions.

*Units = ° Fahrenheit*

**PEDMSTR 046 CONDITIONAL - COLUMN 28 - STACK TEMPERATURE LESS THAN 77 OR GREATER THAN 2000**

**Meaning:** The Stack Temperature must be 77°-2000°F (enter **0077-2000**)

**Action:** See "Stack Temperature" on page 22 for instructions.

*Units = ° Fahrenheit*

**PEDMSTR 047 ERROR - COLUMN 32 - NON-NUMERIC EXHAUST FLOW RATE**

**Meaning:** This field must be numeric.

**Action:** See "Flow Rate" on page 23 for instructions.

*Units = cubic feet per minute (feet<sup>3</sup>/min)*

**PEDMSTR 048 ERROR - COLUMN 39 - NON-NUMERIC VELOCITY**

**Meaning:** This field must be numeric.

**Action:** See "Velocity" on page 23 for instructions.

*Units = feet per minute (not feet/second)*

**PEDMSTR 049 ERROR - COLUMN 44 - NON-NUMERIC PLUME HEIGHT**

**Meaning:** This field must be numeric.

**Action:** See "Plume Height" on page 23 for instructions.

*Units = feet*

**PEDMSTR 050 CONDITIONAL - COLUMN 44 - PLUME HEIGHT IS GREATER THAN 200**

**Meaning:** The Plume Height must be less than 200.

**Action:** See "Plume Height" on page 23 for instructions.

*Units = feet*

**PEDMSTR 051 ERROR - COLUMN 48 - INVALID POINTS WITH COMMON STACK**

**Meaning:** The point id's must contain letters or numbers.

**Action:** See "Points with a Common Stack" on page 24 for instructions.

**PEDMSTR 052 CONDITIONAL - COLUMN 48-1ST POINT GREATER THAN OR EQUAL TO 2ND**

**Meaning:** The first NEDS Point in the "Points with a Common Stack" field must be the smallest number and the last NEDS Point the largest.

**Action:** See "Points with a Common Stack" on page 24 for instructions.

**PEDMSTR 053 CONDITIONAL - COLUMN 52 - INVALID COMPLIANCE STATUS**

**Meaning:** This field is not used by AQD. Leave this field blank.

**PEDMSTR 054 ERROR - COLUMN 53 - INVALID COMPLIANCE SCHEDULE**

**Meaning:** This field is not used by AQD. Leave this field blank.

**PEDMSTR 055 CONDITIONAL - COLUMN 53 - YR OF COMPLIANCE SCHE. NOT W/IN 5 YRS**

**Meaning:** This field is not used by AQD. Leave this field blank.

**PEDMSTR 056 ERROR - COLUMN 57 - INVALID YR OF COMPLIANCE UPDATE**

Meaning: This field is not used by AQD. Leave this field blank.

**PEDMSTR 057 CONDITIONAL - COLUMN 57 - YR OF COMPLIANCE UPDATE > OPTION YEAR**

Meaning: This field is not used by AQD. Leave this field blank.

**PEDMSTR 058 ERROR - COLUMN 60 - NON-NUMERIC DAY FOR OPERATING RATE**

Meaning: The Operating Rate field must be numeric.

Action: See "Operating Rate" on page 19 for instructions.

**PEDMSTR 059 ERROR - COLUMN 21 - NON-NUMERIC POLLUTANT ID**

Meaning: The Pollutant Code field must be numeric.

Action: See "Pollutant Code" on page 27 for instructions.

**PEDMSTR 060 ERROR - COLUMN 26 - NON-NUMERIC CONTROL EQUIPMENT COST**

Meaning: This field is not used by AQD. Leave this field blank.

**PEDMSTR 061 ERROR - COLUMN 33 - INVALID PRIMARY CONTROL EQUIPMENT**

Meaning: The Primary Control Equipment is invalid.

Action: See the discussion of control equipment on page 29 for instructions.

**PEDMSTR 062 ERROR - PRIMARY EQUIP AND EST CONTROL EFF NOT BOTH BLANK**

Meaning: The Primary Control Equipment, Secondary Control Equipment, and Estimated Control Efficiency fields must either all be filled or all be blank.

Action: See the discussion of control equipment on page 29 for instructions.

**PEDMSTR 063 ERROR - COLUMN 36 - INVALID SECONDARY CONTROL EQUIPMENT**

Meaning: The Secondary Control Equipment is invalid.

Action: See "Secondary Control Equipment" on page 29 for instructions.

**PEDMSTR 064 ERROR - COLUMN 39 - NON-NUMERIC ESTIMATED CONTROL EFFICIENCY**

Meaning: The Estimated Control Efficiency field must be numeric.

Action: See "Estimated Control Efficiency" on page 30 for instructions.

**PEDMSTR 065 ERROR - COLUMN 42 - NON-NUMERIC EMISSIONS ESTIMATE**

Meaning: The Estimated Emissions field must be numeric.

Action: See "Estimated Emissions" on page 30 for instructions.

*Units = tpy*

**PEDMSTR 066 ERROR - COLUMN 42 - EMISSION ESTIMATE TOO LARGE**

Meaning: The Estimated Emissions field must be less than 800,000 tpy.

Action: See "Estimated Emissions" on page 30 for instructions.

*Units = tpy*

**PEDMSTR 067 ERROR - COLUMN 42 - EMISS. EST. REQUIRED FOR METHODS 2, 4, 5**

Meaning: Estimation codes **2**, **4**, and **5** require that an Estimated Emissions be entered.



**Action:** Enter an Estimated Emission value. See “Estimated Emissions” on page 30.  
*Units = tpy*

**PEDMSTR 068 ERROR - COLUMN 49 - NON-NUMERIC MEASURED EMISSIONS**

**Meaning:** The Measured Emissions field must be numeric.

**Action:** See “Measured Emissions” on page 31 for instructions.

*Units = tpy*

**PEDMSTR 069 ERROR - COLUMN 56 - NON-NUMERIC ALLOWABLE EMISSIONS**

**Meaning:** This Allowable Emissions field must be numeric.

**Action:** See “Allowable Emissions” on page 31 for instructions.

*Units = tpy*

**PEDMSTR 070 WARNING - COLUMN 63 - NON-NUMERIC EMISSIONS UNITS CODE**

**Meaning:** This field is not used by AQD. Leave this field blank.

**PEDMSTR 071 ERROR - COLUMN 64 - INVALID ESTIMATION METHOD**

**Meaning:** The Estimation Code is invalid.

**Action:** Valid Estimation Codes: **0, 1, 2, 4, 5, 6, 7, or [blank]**. See “Estimation Code” on page 31.

**PEDMSTR 072 WARNING - COLUMN 65 - NON-NUMERIC TEST METHOD**

**Meaning:** This field must be numeric or blank.

**Action:** Valid Baseline Change Codes: **1, 2, 3, or [blank]**. See “Baseline Change” on page 31.

**PEDMSTR 073 WARNING - COLUMN 31 - NON-NUMERIC BEC CODE**

**Meaning:** This field is not used by AQD. Leave this field blank.

**PEDMSTR 074 WARNING - COLUMN 36- NON-NUMERIC FUEL UNITS CODE**

**Meaning:** This field is not used by AQD. Leave this field blank.

**PEDMSTR 075 ERROR - COLUMN 37 - NON-NUMERIC FUEL PROCESS RATE**

**Meaning:** The Fuel, Process, or Solid Waste Operating Rate field must be numeric.

**Action:** See “Solid Waste Operating Rate” on page 38 for instructions.

**PEDMSTR 076 ERROR - COLUMN 44 - NON-NUMERIC MAXIMUM DESIGN RATE**

**Meaning:** The Maximum Design Rate field must be numeric.

**Action:** See “Maximum Design Rate” on page 38 for instructions.

**PEDMSTR 077 ERROR - COLUMN 51 - NON-NUMERIC SULFUR CONTENT**

**Meaning:** The Sulfur Content field must be numeric.

**Action:** See “Sulfur Content” on page 38 for instructions.

**PEDMSTR 078 ERROR - COLUMN 54 - NON-NUMERIC ASH CONTENT**

**Meaning:** The Ash Content field must be numeric.

**Action:** See “Ash Content” on page 38 for instructions.

**PEDMSTR 079 ERROR - COLUMN 57 - NON-NUMERIC HEAT CONTENT**

**Meaning:** The Heat Content field must be numeric.

**Action:** See “Heat Content” on page 39 for instructions.

**PEDMSTR 080 CONDITIONAL - COLUMN 31 - INVALID CONFIDENTIALITY, REPLACING WITH 1**

**Meaning:** The Confidentiality field is invalid—the EIS COBOL program is inserting a **1** here.

**Action:** The valid codes are **1**, **2**, or **[blank]**. See “Confidentiality” on page 41 for instructions.

**PEDMSTR 081 ERROR - COLUMN 31 - CONFIDENTIALITY OF 3 IS NOT ALLOWED**

**Meaning:** The Confidentiality field is invalid.

**Action:** The valid codes are **1**, **2**, or **[blank]**. See “Confidentiality” on page 41 for instructions.

**PEDMSTR 082 ERROR - COLUMN 63 - INVALID ECAP**

**Meaning:** This field is not used by AQD. Leave this field blank.

**PEDMSTR 083 ERROR - COLUMN 62 - INVALID ASH/SULFUR ORIGIN**

**Meaning:** The Ash-Sulfur field is invalid.

**Action:** The valid codes are **F** (Federal), **S** (State), and **L** (Local). See page 39 for instructions.

**PEDMSTR 084 ERROR - COLUMN 33 - FIRST POLLUTANT ID IS NON-NUMERIC**

**Meaning:** The Pollutant Code field must be numeric.

**Action:** See “Pollutant Code” on page 43 for instructions.

**PEDMSTR 085 ERROR - COLUMN 38 - FIRST EMISSION FACTOR IS NON-NUMERIC**

**Meaning:** The Emissions Factor field must be numeric.

**Action:** See “Emissions Factor” on page 44 for instructions.

**PEDMSTR 086 CONDITIONAL - COLUMN 47 - FIRST ASH/SULFUR CODE IS INVALID**

**Meaning:** The Ash Sulfur Code is invalid.

**Action:** The valid codes are **A**(Ash), **S**(Sulfur) and **[blank]**. See “Ash Sulfur Code” on page 44 for instructions.

**PEDMSTR 087 WARNING - COLUMN 48 - FIRST EMISSION FACTOR UNITS CODE IS NON-NUMERIC**

**Meaning:** This field is not used by AQD. Leave this field blank.

**PEDMSTR 088 ERROR - COLUMN 49 - SECOND POLLUTANT ID IS NON-NUMERIC**

**Meaning:** The second Pollutant Code field on Card 23 must be numeric.

**Action:** See "Pollutant Code" on page 43 for instructions.

**PEDMSTR 089 ERROR - COLUMN 54 - SECOND EMISSION FACTOR IS NON-NUMERIC**

**Meaning:** The second Emission Factor field on Card 23 must be numeric.

**Action:** See "Emission Factor" on page 44 for instructions.

**PEDMSTR 090 CONDITIONAL - COLUMN 63 - SECOND ASH/SULFUR CODE IS INVALID**

**Meaning:** The second Ash Sulfur Code is invalid.

**Action:** The valid codes are **A**(Ash), **S**(Sulfur) and **[blank]**. See "Ash Sulfur Code" on page 44 for instructions.

**PEDMSTR 091 WARNING - COLUMN 64 - SECOND EMISSION FACTOR UNITS CODE IS NON-NUMERIC**

**Meaning:** This field is not used by AQD. Leave this field blank.

**PEDMSTR 092 ERROR - COLUMN 78 - INVALID CARD NUMBER FOR DELETE**

**Meaning:** You may not use a **D**(Delete) Action Code with all Card Types.

**Action:** You may only use a **D**(Delete) Action Code with Cards: **11, 13, 21, 23, and 30**.

**PEDMSTR 093 CONDITIONAL - COLUMN 52 - INVALID THRUPUT SUM**

**Meaning:** The sum of the Annual Throughput field must be between 95%-100%.

**Action:** See "Annual Throughput" on page 18 for instructions.

**PEDMSTR 094 CONDITIONAL - COLUMN 21 - STACK HEIGHT < ZERO OR > 500**

**Meaning:** The Stack Height value is invalid.

**Action:** The valid Stack Height range is **0-500** feet. See "Stack Height" on page 21.

**PEDMSTR 095 CONDITIONAL - COLUMN 63 - INVALID ECAP CODE**

**Meaning:** This field is not used by AQD. Leave this field blank.

**PEDMSTR 096 ERROR - COLUMN 26 - INVALID COMMENT FLAG**

**Meaning:** The L/R Comment Flag field is invalid.

**Action:** The valid codes are **L**(Left) and **R**(Right). See "L/R Comment Flag" on page 52 for instructions.

**PEDMSTR 097 CONDITIONAL - COLUMN 56 - ALLOWABLE EMISSIONS OUT OF RANGE**

**Meaning:** The Allowable Emissions field is probably too high.

**Action:** The "Allowable Emissions" field is greater than 25,000, and it probably should not be—check your permit.

**PEDMSTR 098 ERROR - INVALID CHARACTER DETECTED IN CONVERSION ROUTINE**

**Meaning:** A non-alphanumeric character was encountered in the Facility id or NEDS id.

**Action:** Only numbers and letters are allowed for these two fields.

**PEDMSTR 099 CONDITIONAL - COLUMN 33 - SOURCE DESCR. BLANK FOR SCC 97, 98, OR 99**

**Meaning:** The Source Description field was blank while adding a NEDS Point with an SCC ending in 97, 98, or 99.

**Action:** A "Source Description" is required for **A**(Add) transactions where the SCC ends in 97, 98, or 99.

**PEDMSTR 100 CONDITIONAL - NEDS POINT ID NOT WITHIN COMMON STACK POINTS**

**Meaning:** The NEDS Point id did not lie between the common stack points.

**Action:** See "Points with a Common Stack" on page 24 for instructions.

**PEDMSTR 101 CONDITIONAL - COLUMN 42 - ESTIMATED EMISSIONS BETWEEN 25,000 AND 800,000**

**Meaning:** The value is between 25,000 and 800,000.

**Action:** Unless you are a major emitter, the value is probably too high.

**PEDMSTR 102 ERROR - COLUMN 19 - NAME/ADDRESS FIELD CANNOT BE DELETED**

**Meaning:** The Facility Name and Physical Address field cannot be deleted.

**Action:** Correct.

**PEDMSTR 103 ERROR - COLUMN 33 - SOURCE DESCRIPTION CANNOT BE DELETED**

**Meaning:** The Source Description field cannot be deleted.

**Action:** Correct.

**PEDMSTR 104 ERROR - NON-KEY FIELDS NOT BLANK FOR DELETE**

**Meaning:** All fields between the Key Block data, Card Number, and Action Code must be blank on a **D**(Delete) Card. This is to insure that records are not deleted by mistake.

**Action:** Enter [**blanks**] in between the Key Block and 11D (or 21D). See Appendix H.

**PEDMSTR 105 ERROR - COLUMN 63 - INVALID ASH/SULFUR SOURCE**

**Meaning:** The Ash-Sulfur Source Code is invalid.

**Action:** Ash-Sulfur Source codes of **F**, **S** or **L** are not allowed; all other letters and numbers are allowed. See "Ash-Sulfur Source Code" on page 39 for instructions.

**PEDMSTR 106 ERROR - COLUMN 31 - INVALID EMF ORIGIN**

**Meaning:** The EMF Origin is invalid.

**Action:** Valid codes are **F** (Federal), **S** (State), and **L** (Local). See "EMF Origin" on page 43.

**PEDMSTR 107 ERROR - COLUMN 32 - INVALID EMF SOURCE**

**Meaning:** The EMF Source Code is invalid.

**Action:** EMF Source codes of **F**, **S** or **L** are not allowed; all other letters and numbers are allowed. See "Ash-Sulfur Source Code" on page 43 for instructions.

**PEDMSTR 108 - CONDITIONAL - COLUMN 62 - INVALID WEEK FOR OPERATING RATE**

**Meaning:** The Operating Rate field is invalid.

**Action:** The day per week must be **0-7**. See "Operating Rate" on page 19 for instructions.

**PEDMSTR 109 ERROR - COLUMN 62 - NON-NUMERIC WEEK FOR OPERATING RATE**

**Meaning:** The Operating Rate field must be numeric.

**Action:** See "Operating Rate" on page 19 for instructions.

**PEDMSTR 110 - CONDITIONAL - COLUMN 63 - INVALID YEAR FOR OPERATING RATE**

**Meaning:** The weeks per year must be between **0-52**.

**Action:** See "Operating Rate" on page 19 for instructions.

**PEDMSTR 111 ERROR - COLUMN 63 - NON-NUMERIC YEAR FOR OPERATING RATE**

**Meaning:** The Operating Rate field must be numeric.

**Action:** See "Operating Rate" on page 19 for instructions.

**PEDMSTR 112 ERROR - COLUMN 42 - EMISSIONS ARE > 0 FOR ESTIMATION METHOD 6 OR 7**

**Meaning:** Estimated Emissions must be zero when using Estimation Method 6 or 7.

**Action:** Correct.



## PFMMSTR EIS PROGRAM

### (FORMAT MAINTENANCE PROGRAM)

PFMMSTR checks EIS Submittal Files for "format errors," such as trying to add a NEDS Point that is already on the Master File, trying to delete a NEDS Point that is not in the Master File, etc. When the PFMMSTR program finds a format error in a submittal file, it writes a PFMMSTR Error Report. The AQD examines all error reports. Those files that can be fixed by the AQD are edited and merged, and those files that cannot are mailed back with a letter, requesting that the Submittal File be corrected and a printout, describing the errors found in the file.

Below is a sample PFMMSTR Error Report. The PFMMSTR report is difficult to read because it was designed to be printed on a wide lineprinter. If you do not understand a PFMMSTR error message, refer to the PFMMSTR Appendix entries.

**It is strongly suggested that you correct PEDMSTR errors and resubmit your EIS file before you attempt to correct any PFMMSTR errors.**

### SAMPLE PFMMSTR ERROR REPORT

```

EIS FILE MAINTENANCE PROGRAM - DIAGNOSTIC MESSSAGES      Report
PAGE          1                                           Header
PROGRAM NAME: PFMMSTR (EP0120)
REVISION LEVEL: 2-02                                     "Additional"      EIS
Card data that Error                                     Master File data  you
LAST UPDATE #: P-5
entered Message
DATE INCORPORATED: APRIL 30, 1986
OPTION CARD
CONTROL DATE IS 95 , ERROR OPTION IS FLAGW , LIST
OPTION IS LIST

19020010600007777000110000000000000000000141190200106777795365010
FGC01 WHITE G-3400
14A

*** PFMMSTR 006 ERROR - ADD
TRANSACTION, RECORD ALREADY ON MASTER
FILE, CARD REJECTED

(some error messages were deleted for the sake of brevity)

190200106000077770005220200202000000002311902001067777953650520
20020200FH42602                42101
23A

```

## Appendix K

```
*** PFMMSTR 028 ERROR -  
INVALID INITIAL ADD CARD NUMBER  
EIS FILE MAINTENANCE PROGRAM -  
DIAGNOSTIC MESSSAGES  
PAGE      2  
    NUMBER OF INPUT TRANSACTIONS READ  
68  
    NUMBER OF DISASTERS DETECTED  
0  
    NUMBER OF ABORTS DETECTED  
0  
    NUMBER OF ERRORS DETECTED  
2  
    NUMBER OF CONDITIONALS DETECTED  
0  
    NUMBER OF WARNINGS DETECTED  
0  
    NUMBER OF TRANSACTIONS REJECTED  
2  
    NUMBER OF POINT SOURCE FILE RECORDS READ IN  
9  
    NUMBER OF POINT SOURCE FILE RECORDS WRITTEN OUT  
12
```



**Sample PFMMSTR Appendix Entry**

<i>EIS COBOL Program</i>	<i>Error No.</i>	<i>Error Type</i>	<i>Error Message</i>
<b>PFMMSTR</b>	<b>010</b>	<b>ERROR</b>	<b>- INVALID ACTION CODE ON TRANSACTION</b>
<b>Meaning:</b> Valid action codes are <b>A</b> (Add), <b>C</b> (Change), and <b>D</b> (Delete).			
<b>Action:</b> Correct and resubmit the transaction.			

**APPENDIX TERMS:****EIS Program:** PEDMSTR or PFMMSTR**Error No.:** Sequential numbers 000-111.**Error Type:** Types of errors which occur:

- 1) **ERROR** - Must be corrected before the EIS file can be merged.
- 2) **CONDITIONAL** - Can be ignored.
- 3) **WARNING** - Can be ignored.
- 4) **ABORT** - Can be ignored.

**Error Message:** EIS Error Message**Meaning** Comment that describes the meaning of the error message.

## **PFMMSTR ERROR MESSAGES:**

### **PFMMSTR 001-PFMMSTR 003**

Action: Ignore.

### **PFMMSTR 004 ERROR -FIELDS MISSING FOR EMISS. CALCULATIONS, 0 USED FOR ESTIMATE**

Meaning: One or more needed fields were missing for an SCC, zero was used for the emission estimate for that SCC.

Action: See "Stack Data" on page 21 for instructions.

Tip 1: If 3 was used for the Estimation Code (Card 13, Column 64), change to 5.

Tip 2: Make sure that all the required Stack Data are entered on Card 12 and that the Annual Throughput and Operating Rate are on Card 11.

### **PFMMSTR 005 ERROR - NO MATCH ON MASTER FILE FOR TRANSACTION**

Meaning: A C(Change) or D(Delete) transaction was entered, but there was no matching record in the Master File.

Action: See Appendix H for a discussion on how to use Action Codes.

Tip: Check the file mailed to the facility by the AQD. There may be a discrepancy between the data on the Master File and the Submittal File.

### **PFMMSTR 006 ERROR - ADD TRANSACTION, RECORD ALREADY ON MASTER FILE**

Meaning: An A(Add) transaction was entered for a record that already exists in the Master File.

Action: See Appendix H for a discussion on how to use Action Codes.

Tip: Check the file mailed to the facility by the AQD. There may be a discrepancy between the data on the Master File and the Submittal File.

### **PFMMSTR 007 ERROR - TRANSACTION NOT ADD, BUT NO MASTER ON FILE**

Meaning: An Action other than A(Add) was entered for a record not in the Master File.

Action: See Appendix H for a discussion on how to use Action Codes.

Tip: Check the file mailed to the facility by the AQD. There may be a discrepancy between the data on the Master File and the Submittal File.

### **PFMMSTR 008 CONDITIONAL - INVALID LIST FIELD ON OPTION CARD**

Action: Ignore.

### **PFMMSTR 009 ABORT - TRANSACTION FILE OUT OF SEQUENCE**

Action: This error is caused by other errors. Fix other errors and ignore this one.

### **PFMMSTR 010 ERROR - INVALID ACTION CODE ON TRANSACTION**

Meaning: Valid action codes are A(Add), C(Change), and D(Delete).

Action: See Appendix H for a discussion on how to use Action Codes.

### **PFMMSTR 011 ERROR - INVALID CARD NUMBER ON TRANSACTION**

Meaning: The Card Number was invalid.

**Action:** Valid Card numbers are **01, 02, 03, 04, 11, 12, 13, 14, 21, 22, 23, 24, 25, 30**.

**PFMMSTR 012 ERROR - POINT POLLUTANT ID ALREADY ON FILE**

**Meaning:** An **A**(Add) transaction was entered for a pollutant that already exists in the Master File

**Action:** See Appendix H for a discussion on how to use Action Codes.

**PFMMSTR 013 ERROR - ATTEMPT TO ADD MORE THAN MAX NUMBER OF POINT POLLUTANTS**

**Meaning:** There are too many pollutants associated with a NEDS Point.

**Action:** A maximum of sixteen pollutants may be entered for each NEDS Point. You need only report the six pollutants specified on page 27.

**PFMMSTR 014 ERROR - NO MATCHING POINT POLLUTANT ID FOR TRANSACTION**

**Meaning:** A **C**(Change) Action Code was input for a pollutant that does not exist for the point.

**Action:** See Appendix H for a discussion on how to use Action Codes.

**Tip:** Check the file mailed to the facility by the AQD. There may be a discrepancy between the data on the Master File and the Submittal File.

**PFMMSTR 015 ERROR - SCC POLLUTANT ID ALREADY ON FILE, POLLUTANT REJECTED**

**Meaning:** An **A**(Add) transaction was entered for a pollutant that already exists for the SCC.

**Action:** See Appendix H for a discussion on how to use Action Codes.

**Tip:** Check the file mailed to the facility by the AQD. There may be a discrepancy between the data on the Master File and the Submittal File.

**PFMMSTR 016 ERROR - ATTEMPT TO ADD MORE THAN MAX NUMBER OF SCC POLLUTANTS**

**Meaning:** A maximum of 16 pollutants can be specified for an SCC.

**Action:** A maximum of sixteen pollutants may be specified for each NEDS Point. You need only report the six pollutants specified on page 27.

**PFMMSTR 017 ERROR - NO MATCHING SCC POLLUTANT ID FOR TRANSACTION**

**Meaning:** A Change transaction was input for a pollutant that does not exist for the SCC.

**Action:** See Appendix H for a discussion on how to use Action Codes.

**Tip:** Check the file mailed to the facility by the AQD. There may be a discrepancy between the data on the Master File and the Submittal File.

**PFMMSTR 018 ABORT - INPUT MASTER FILE OUT OF SEQUENCE**

**Action:** Ignore.

**PFMMSTR 019 ERROR - NEW MASTER RECORD INCOMPLETE, NOT WRITTEN**

**Meaning:** Valid **01**, **02**, **03**, and **04** Cards are required to add a Facility Record. Valid **11**, **12**, **13**, and **14** Cards are required to add a Point Record. Valid **21**, **22**, and **23** Cards are required to add an SCC Record.

**Action:** See Appendix H for a discussion on how to use Action Codes.

**PFMMSTR 020 ERROR - POINT INCOMPLETE, SCC NOT WRITTEN TO OUTPUT MASTER FILE**

**Meaning:** Valid **11**, **12**, **13**, and **14** Cards are required to add a Point Record, and valid **21**, **22**, and **Card 23s** are required to add an SCC Record—at least one of these Cards was not found in the Submittal File, so no SCC records will be written for the point, even though they may have all necessary Cards.

**Action:** Insure that all required Cards are present. See Appendix H for a discussion on how to use Action Codes.

**PFMMSTR 021 ABORT - OUTPUT MASTER FILE OUT OF SEQUENCE**

**Action:** Ignore.

**PFMMSTR 022 ABORT - INVALID RECORD ON INPUT MASTER FILE**

**Action:** Ignore.

**PFMMSTR 023 ERROR - OVERFLOW FOR EMISSIONS ESTIMATE - RESULT INVALID**

**Action:** Ignore.

**PFMMSTR 024 ERROR - ATTEMPT TO ADD COMMENT TO NONEXISTENT POINT**

**Meaning:** Comment Records can only be added when a corresponding Point Record exists.

**Action:** Check your NEDS id. Check the file sent to you by AQD to see whether this NEDS id is in the Master File.

**Tip:** Check the file mailed to the facility by the AQD. There may be a discrepancy between the data on the Master File and the Submittal File.

**PFMMSTR 025 ERROR - ATTEMPT TO ADD SCC TO NONEXISTENT POINT**

**Meaning:** SCC Records can only be added when the corresponding Point Record exists.

**Action:** Check your NEDS id. Check the file sent to you by AQD to see whether this NEDS id is in the Master File.

**PFMMSTR 026 ERROR - ATTEMPT TO ADD POINT TO NONEXISTENT PLANT**

**Meaning:** Point Records can only be added when the corresponding Facility Record exists.

**Action:** See Appendix H for an explanation on how to add a facility.

**Tip:** Check the file mailed to the facility by the AQD. There may be a discrepancy between the data on the Master File and the Submittal File.

**PFMMSTR 027 ERROR - INVALID CARD NUMBER FOR DELETE**

**Meaning:** The valid **D**(Delete) Card Types: **11D**, **13D**, **21D**, **23D**, and **30D**.

**Action:** See Appendix H for a discussion on how to use Action Codes.

**PFMMSTR 028 ERROR - INVALID INITIAL ADD CARD NUMBER**

**Meaning:** A Card **01A**, **11A**, **21A**, or **30A** is required to initiate the addition of a Record.

**Action:** See Appendix H for a discussion on how to use Action Codes.

**PFMMSTR 029 ERROR - ATTEMPT TO ADD DUPLICATE SCC**

**Meaning:** You may have attempted to add the same SCC Number and SCC Sequence Number in multiple SCC Records. Up to 10 SCC Records can be entered per NEDS Point, but only where the SCC Number and/or SCC Sequence Numbers are different within each SCC Record.

**Action:** See "SCC" on page 37.

**Tip:** Check the file mailed to the facility by the AQD. There may be a discrepancy between the data on the Master File and the Submittal File.

**PFMMSTR 030 ERROR - ATTEMPT TO DELETE POINT POLL NOT ON FILE**

**Meaning:** A **D**(Delete) Card was entered for a pollutant that does not exist at that Point.

**Action:** You may have entered the wrong SAROAD Pollutant Code or the wrong NEDS id. Check the Card for edit errors. If you find no edit errors, you may want to check the file sent to you by AQD.

**PFMMSTR 031 ERROR - ATTEMPT TO DELETE SCC POLLUTANT NOT ON FILE**

**Meaning:** A **D**(Delete) Card was entered for a pollutant that does not exist at an SCC Record.

**Action:** You may have entered the wrong SCC number or the wrong NEDS id. Check the Card for edit errors. If you find no edit errors, you may want to check the file sent to you by AQD.

**PFMMSTR 032 ERROR - MASTER FILE CONTAINS SCC WITH NO POINT**

**Meaning:** An SCC was encountered with no matching NEDS Point.

**Action:** Check the NEDS Point ID.

**PFMMSTR 033 ERROR - MORE THAN MAXIMUM NUMBER OF SCC FOR POINT**

**Meaning:** A maximum of 10 SCC numbers are allowed for a single point.

**Action:** Use no more than 10 SCCs per NEDS Point.

**PFMMSTR 034 ERROR - DUPLICATE TRANSACTION - CARD REJECTED**

**Meaning:** Duplicate keys are allowed only on change transactions. The first Card is accepted and the second rejected.

**Action:** Delete any Cards in the Submittal File that are duplicates.



## PREVALIDATION PROGRAM (PVP)

In an attempt to increase the quality of the EIS data base, the AQD has implemented the PreValidation Program (PVP), a new computer program similar to the original PEDMSTR and PFMMSTR programs in function. The PVP examines Submittal files for errors and generates an Error Report, if it finds any.

When the PVP program encounters an error in a Submittal File, it writes an Error Report similar to the PEDMSTR and PFMMSTR reports. However, unlike the PEDMSTR and PFMMSTR Error Reports, the error message precedes the line of invalid data in the PVP Error Report.

Below is a sample PVP Error Report generated by the PreValidation Program. This is the report that you will receive in the mail, if your submittal file has errors.

### SAMPLE PVP ERROR REPORT

```

RECORD EXCEEDS 80 BYTE LENGTH AT
190180106777794365ABC REFINING CO. RIVERDALE RD RUSTON, LA  1 162 02A
CODE NOT F, S OR L IN CARD 21 COL 62 AT
190180106777794365044040030500                                21A
INCOMPLETE CARD DECK FOR CARD-11 ADD AT
190180106777794365041175171 540733436          2525252524752      11A
INCOMPLETE CARD DECK FOR CARD-21 ADD
190180106777794365044040030500                                21A
NEDS POINT EXISTS WITHOUT CARD 14
190180106777794365041175171 540733436          2525252524752      11A
NEDS POINT EXISTS WITHOUT CARD 14
19018010677779436512BL14463 540733436          2525252503352      11A
INVALID OR MISSING CARD NUMBERS
NON-ASCII CHARACTERS FOUND ON FILE

```

### PVP ERROR MESSAGES:

#### 1. RECORD EXCEEDS 80 BYTE LENGTH

**Meaning:** The Card (or line) is longer than 80 columns.

**Action:** All EIS Cards may only be up 80 columns in length.

#### 2. CARD 01 DELETE NOT ALLOWED

**Meaning:** The Card 01 has a **D** Action Code.

**Action:** You are not allowed to use the **D** Action Code on Card one. See Appendix H for instructions on how to use Action Codes.

**3. INCOMPLETE CARD DECK FOR CARD-11 ADD**

**Meaning:** There was a Card 11A without Cards 12A, 13A, 14A, 21A, etc. for a Point.

**Action:** For every Card 11A, there must be a complete Point Record and SCC Record. See Appendix H for instructions on how to add a Point Segment.

**4. INCOMPLETE CARD DECK FOR CARD-21 ADD**

**Meaning:** There was a Card 21A without Card 22A, 23A, 24A, and 25A for a Point.

**Action:** For every Card 21A, there must be a complete SCC Record. See Appendix H for instructions on how to add an SCC Segment.

**5. MEASD EMISSIONS NOT EQUAL ESTID EMISSIONS**

**Meaning:** The Measured and Estimated Emissions fields were not the same.

**Action:** If emissions were measured, the Measured and Estimated Emissions fields must be the same. See "Measured Emissions" on page 31.

**6. CODE NOT F, S OR L IN CARD 21 COL 62**

**Meaning:** The Ash-Sulfur Origin code is invalid.

**Action:** Enter **F** or **L**, but do not enter **S**.

**7. CARD 21 COL 62 NOT EQUAL TO CARD 23 COL 31**

**Meaning:** The Ash-Sulfur Origin (Card 21) and EMF-Origin (Card 31) were different.

**Action:** Enter the same code for Ash-Sulfur Origin (Card 21) and EMF-Origin (Card 31).

**8. INVALID CODES IN CARD 14 COLS 21-22**

**Meaning:** The Descriptive Code for Sources was invalid.

**Action:** Enter a valid code. See "Descriptive Codes for Sources" on page 35.

**9. CONFLICTING IDS FOUND ON FILE**

**Meaning:** There are multiple EIS Facility ids in the Submittal File.

**Action:** There may not be more than one facility in a Submittal File. Each facility must be in separate Submittal Files.

**10. NON-ASCII CHARACTERS FOUND ON FILE**

**Meaning:** There was a "non-ASCII" character found in the file.

**Action:** The EIS cannot process files that contain characters outside of the ASCII range 32-128. The EIS system cannot accept file in commercial file formats like WordPerfect® or Quatro Pro®. Also see "ASCII" and "File Format"

**11. MORE THAN ONE CARD 1 FOUND ON FILE**

**Meaning:** There was more than one 01 Cards in the Submittal File.

**Action:** There may be more than one facility in the computer Submittal File. Each facility must be presented in separate Submittal Files.



**12. MORE THAN ONE CARD 2 FOUND ON FILE**

**Meaning:** There was more than one 02 Cards in the Submittal File.

**Action:** There may be more than one facility in the computer Submittal File. Each facility must be presented in separate Submittal Files.

**13. MORE THAN ONE CARD 3 FOUND ON FILE**

**Meaning:** There was more than one Card 03s in the Submittal File.

**Action:** There may be more than one facility in the computer Submittal File. Each facility must be presented in separate Submittal Files.

**14. CANNOT RESOLVE INTERNAL EIS ID**

**Meaning:** The Facility id (columns 3-6 and 10-13 on every Card) is not in Master File.

**Action:** If you have any questions about what your Facility id should be, call the E.I. Unit Coordinator at (504) 765-0190.

**15. INVALID OR MISSING CARD NUMBERS**

**Meaning:** A line was found in the file that had no Card Number.

**Action:** Correct.

**16. CARD 11 EXISTS WITHOUT CARD 14**

**Meaning:** A Card 11 in the Submittal File did not have a matching CARD 14.

**Action:** There must be a Card 14 for every NEDS Point in the Submittal File.

**17. NO RECORDS WITH ACTION CODE**

**Meaning:** No line in the Submittal File had an Action Code.

**Action:** There must always be an Action Code in Cards 01-04; and there must always be Action Codes on Cards where you are changing data.

**18. NO CARD 14 FOR NEDS POINT**

**Meaning:** A 14 Card was not found for every NEDS Point in the Master File.

**Action:** There must be a Card 14 for every NEDS Point in the Submittal File and for every NEDS Point in the EIS Master File. If there is a Card 14 for every NEDS Point in the Submittal File, then check the original data file mailed to the facility by the AQD.

**19. CARD 11 DELETE CONTAINS DATA**

**Meaning:** There is data on the Card 11 between the Key Block and Card Numbers.

**Action:** Delete all data between the Key Block and Card numbers.

**20. CARD 11 DELETE HAS SUBORDINATE DATA**

**Meaning:** There are Cards in the file with the same NEDS Ids as the CARD 11D.

**Action:** See Appendix H for instructions on how to delete a NEDS Point.

**21. DATA PREVIOUSLY ACCEPTED**

**Meaning:** There are Cards in the file with the same NEDS Ids as the CARD 11D.

**Action:** See Appendix H for instructions on how to add/delete a NEDS Point.

**22. CARD 02 OR 03 - COL. 19-66 REQUIRED UNDERSCORES NOT FOUND, 5 NEEDED**

**Meaning:** There must be exactly 5 underscore characters in the address field.

**Action:** Include the missing underscore character(s).

**23. CARD 02 OR 03 - COL. 19-66 SUB-FIELD 1-NAME MAY NOT BE BLANK**

**Meaning:** The “name sub-field” of the address field is missing.

**Action:** Include the “name sub-field”.

**24. CARD 02 OR 03 - COL. 19-66 SUB-FIELD 2-ADDRESS MAY NOT BE BLANK**

**Meaning:** The “street address sub-field” of the address field is missing.

**Action:** Include the “street address sub-field”.

**25. CARD 03 - COL. 19-66 SUB-FIELD 3-CITY MAY NOT BE BLANK**

**Meaning:** The “city sub-field” of the address field is missing.

**Action:** Include the “city sub-field”.

**26. CARD 02 OR 03 - COL. 19-66 SUB-FIELD 4-STATE MAY NOT BE BLANK**

**Meaning:** The “state sub-field” of the address field is missing.

**Action:** Include the “state sub-field”.

**27. CARD 02 OR 03- COL. 19-66 SUB-FIELD 5-ZIP CODE MAY NOT BE BLANK**

**Meaning:** The “zip sub-field” of the address field is missing.

**Action:** Include the “zip sub-field”.

**28. CARD 13 CHANGE OR ADD-COL. 42-48 EMISSIONS ESTIMATE MAY NOT BE BLANK**

**Meaning:** The Estimated Emissions field may not be blank when adding a Card 13.

**Action:** See “Estimated Emissions” on page 30.

## APPENDIX L

### SUPPLEMENTAL INSTRUCTIONS

This Supplemental Index contains much of the general instructions and information that was previously contained in the EIS Coding Manual Supplement.

#### TANKS

In the past, tank information was entered into Card 30 Comments. Tank data should no longer be entered in Card 30. Tanks that share a common SCC may be grouped together for reporting purposes and reported as a single NEDS Point.

#### PROCEDURE FOR MODELING A FLARE

The following stack parameters should be used in Card 12 if the point is a flare:

- \* Actual stack or flare height (in feet)
- \* Exit Velocity = 3937 (in feet/min)
- \* Temperature = 1832° (Fahrenheit)
- \* The Diameter (D) of the stack is calculated as follows:

$$D \text{ [ft]} = (51.4563E-3) * (Qh)^{1/2} \text{ [BTU/sec]}$$

Where Qh is calculated as  
 $Qh \text{ [BTU/sec]} = (0.45)(H) \text{ [BTU/sec]}$

The total heat released (H) from a flare is calculated depending on the heat content of the gas and the flowrate. For example, if the heat content of the gas is 1.1 BTU/MCF and the flowrate is 1500 MCF/DAY (1 MCF=1000 FT<sup>3</sup>) , then the total heat released is 19E-3 BTU/SEC. Therefore, the diameter is .0047 FT. In the case of reporting emissions, the diameter in columns 25-27 would be 00.0 ft.

#### Assumptions:

1. 45% of the total heat released is sensible heat.
2. The average ambient air temperature is 68° Fahrenheit.
3. The temperature of the flame is 1832° Fahrenheit.
4. The exit velocity is 65.6168 feet/sec.
5.  $C_p = 0.24 \text{ cal/g}^{\circ} \text{ Kelvin}$
6. The density of the gas is 1205 g/m<sup>3</sup>.

### ACCIDENTAL RELEASES

All accidental releases must be reported under a single NEDS id. Set aside a NEDS id for this purpose. In a year when there *are* accidental releases, report the (as though the releases were from multiple “boilers” releasing through a common stack) under the “accidental release NEDS id,” and in a year when there *aren’t* accidental releases, delete the “accidental release NEDS id” with a Card 11D.

As a caveat to the above instructions, remember that only ten SCC numbers may be associated with any one NEDS id. Therefore, it may be necessary to create more than one NEDS id to accommodate cases where there are more than ten SCC associated with several accidental releases.

Also, be sure to enter a comment in the Card 24/25 or Card 30 Comment fields, describing the details of the accidental release, and indicating which NEDS Points had the accidental release.

### TOP 20 COMMON ERRORS

- 1) Incomplete or invalid SCC Numbers.
- 2) Incomplete or invalid SCC Sequence Number.
- 3) Invalid Key Block data. For example, invalid Parish Code, or Facility id.
- 4) Incorrect UTM coordinates. See Appendix G.
- 5) Missing or invalid SAROAD Pollutant Codes on 13 or Card 23s.
- 6) Bad Emissions Estimation Code (Card 13). Use **5** and not 3.
- 7) Missing or invalid Ash-Sulfur Origin (Card 21) and EMF Origin (Card 23).
- 8) Data in “unused fields”. Leave unused fields blank.
- 9) Annual Throughput field (Card 11) does not add up to between 95-105%.
- 10) Incorrect Operating Rate (Card 11).
- 11) Both the Control Equipment and Control Efficiency fields (Card 11) not entered. Enter “**000**” in any unused fields or blanks in all fields.
- 12) Incorrect Control Efficiency. You are allowed to enter different Control Efficiencies for different pollutants associated with the same NEDS Point.

- 13) Zeroes entered in the SAROAD Pollutant Code fields on Card 23. At least one of the Pollutant Code fields on Card 23 must be entered; the other may be blank, but never zero-filled.
- 14) Not converting the Stack Velocity (Card 12) to feet/minute units. EIS uses feet/minute units and the EIQ uses feet/second units.
- 15) Measured and Estimated Emissions (Card 13) not equal. If Measured Emissions are entered, then Estimated and Measured Emissions must be equal. If emissions were not measured and only estimated, then enter the Estimated Emissions and zero-fill the Measured Emissions field.
- 16) Invalid Standard Industrial Classification (SIC) Code. "0000" is not a valid SIC. In fact, SICs never end in zero, are always four digits long and are always numeric. Use only valid SIC Codes.
- 17) Invalid Source Classification Codes (SCCs). A list of SCCs is available on the DEQ/Emissions Inventory Bulletin Board System (504) 765-0365.
- 18) Submittal Files in dBASE®, MS-Word® WordPerfect®, Lotus-123®, or other application file format. Submit only "flat ASCII" format. Most application programs allow you to "Save" or "Export" a file in flat ASCII format.
- 19) Invalid Facility id Number. If the facility is a first-time reporter, a new EIS Facility ID Number will be assigned. Do not create the Facility id Number. Call the AQD, E.I. Unit Coordinator at (504) 765-0190, and request a new EIS Facility id Number.
- 20) Insufficient comments on Cards 14 and 24/25.

## BASIC EMISSION CALCULATIONS

### To do the calculation, you will Need:

- 1) Annual Operating Rate
- 2) Federal Factors (AP-42)
- 3) Fuel Parameters (Ash/Sulfur Content)
- 4) Control Efficiency, if applicable

$$\text{Rate for SCC (lbs/SCC Unit)/2000 (Weighted Percent of Ash/Sulfur)} = \text{Annual Operating Rate} * \text{Emission Factor} * \text{Fuel Parameter} * (100 - \text{C.E.})$$

Use *FIRE* Program to check calculations.